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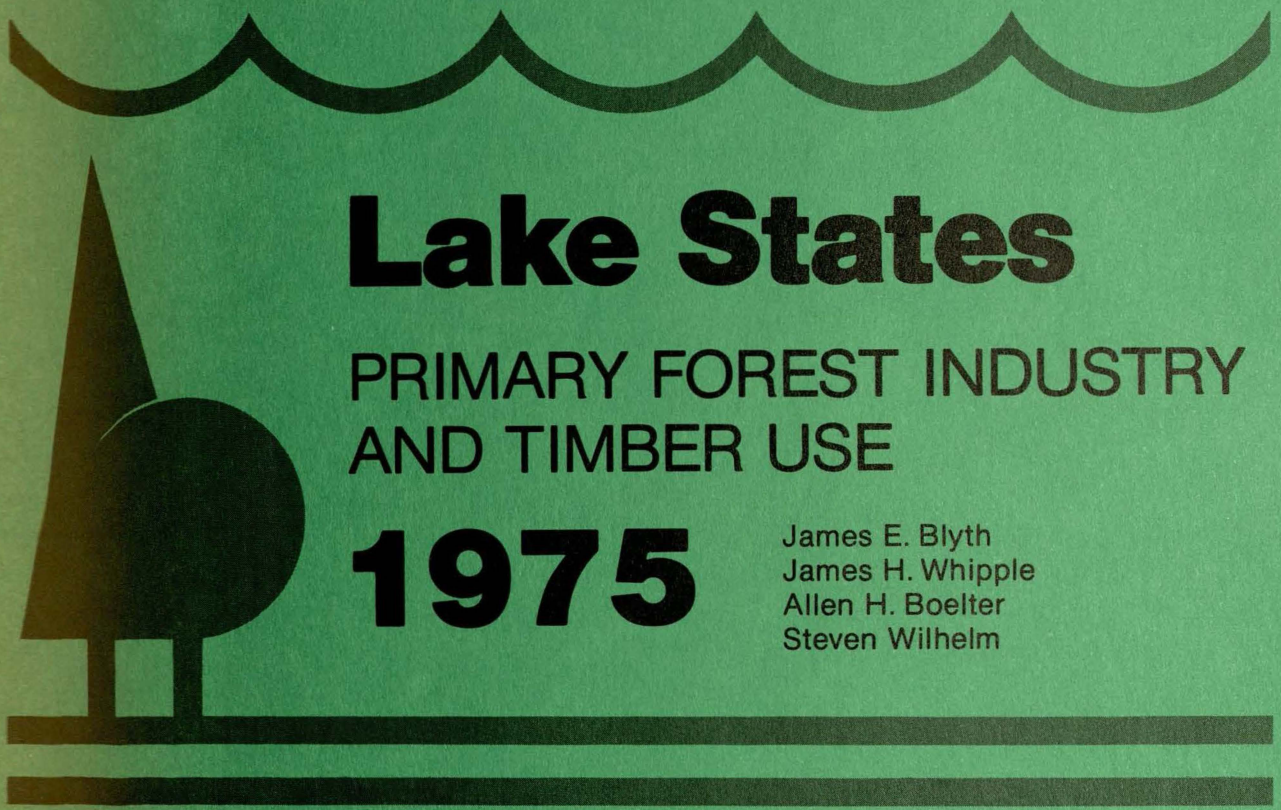

Lake States

PRIMARY FOREST INDUSTRY AND TIMBER USE

1975

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FOREWORD

This publication contains the results of a detailed study of forest industry and industrial roundwood production in the Lake States (Michigan, Minnesota, and Wisconsin) in 1975. Such detailed information is necessary for intelligent planning and decision-making in wood procurement, forest resource management, and forest industry development. Also, researchers need current forest industry and industrial roundwood information for planning projects.

Special thanks are given to the primary wood-using firms that supplied information for this study. Their cooperation is greatly appreciated.

Quantities shown may vary slightly from one table to another because of rounding differences, but these differences are insignificant.

Pulpwood production in Minnesota is completely and accurately shown. However, to prevent disclosure of confidential information about softwood pulpwood use by individual companies, the total quantity of softwood pulpwood imports in Minnesota from Canada and softwood exports from Minnesota to Canada are not reported. Thus, some Minnesota softwood shipped to Canada is shown as remaining and used in Minnesota and receipts of Canadian softwood in Minnesota are understated.

Veneer logs produced and shipped to a specialty veneer company in Minnesota are reported in the "miscellaneous" product or "other" product categories to prevent disclosure of confidential data about the mill.

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LAKE STATES PRIMARY FOREST INDUSTRY AND TIMBER USE, 1975

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HIGHLIGHTS

- Industrial roundwood production was 455.3 million cubic feet—two-thirds was hardwood and one-third was softwood.
- Based on commercial forest acreage owned, the public and private sectors in Minnesota and Wisconsin each contributed about their share of the harvest.
- More than half the hardwood industrial roundwood cut was aspen. Jack pine was the major softwood cut.
- Ninety-four percent of the roundwood harvest was pulpwood and saw logs.
- Lake States pulpmills use more than twice as much roundwood as Lake States sawmills.
- Roundwood accounted for 89 percent of the 4.14 million cords of pulpwood produced.
- Wisconsin pulpmills depend heavily on out-of-State pulpwood.
- Lake States loggers harvested 850 million board feet of saw logs. The major species cut were aspen, red oak, and hard maple.
- Regional sawmills imported only 1.1 million board feet of logs from other regions and Canada.
- Primary wood-using mills (except pulpmills) generated 1,156,000 green tons of coarse wood residue, 724,000 green tons of fine wood residue, and 531,000 green tons of bark.
- Markets for coarse residue were good within the region. Demand for fine wood residue and bark was satisfactory in Wisconsin and poor in Minnesota and Michigan.

ECONOMIC BACKGROUND

From an economic viewpoint, 1975 was not a good year for most United States industries including the forest industry. Our Nation was struggling to recover from a recession, unemployment was more than 8 percent, and housing starts were low. National lumber production was lower than in any year since 1961 and pulpwood production was lower than in any year since 1969. The results of this regional study should be used cautiously and with the understanding that national and regional markets for major forest products were very weak in 1975. In comparing data in this publication with similar published data for other years, the economic conditions for each year should be carefully considered.

PRIMARY FOREST INDUSTRY—INDUSTRIAL ROUNDWOOD

Industrial roundwood production in the Lake States in 1975 was 455.3 million cubic feet—37 percent from Wisconsin, 33 percent from Michigan, and 30 percent from Minnesota.

Of the 889 active primary wood-using mills in 1975 in the Lake States, 775 were sawmills. Because lumber markets were poor in 1975, between 100 and 200 small sawmills were not producing that probably would have been operating if the economy were stronger. Forty-one pulpmills used more than twice as much roundwood (including chips from roundwood) as the sawmills. Markets for high quality logs were provided by 31 veneer mills. Another 42 mills made a wide variety of products including cooperage (barrel staves), shavings, lath, particleboard, charcoal, excelsior, fencing, and other specialty products.

Major mills are concentrated in the Upper Peninsula and northern Lower Peninsula of Michigan; northern and north-central Minnesota; and northeastern Wisconsin (fig. 1).

About 68 percent of commercial forest land in Wisconsin is privately owned and provided 71 percent of Wisconsin's industrial roundwood harvest in 1975 (fig. 2). In Minnesota, 46 percent of commercial forest land is privately owned and furnished 49 percent of the industrial roundwood. Based on commercial forest acreage owned, the public and private sectors are each providing approximately their share of the harvest in Minnesota and Wisconsin. Similar harvest by owner class data were not collected in Michigan.

About two-thirds of the industrial roundwood was hardwood. More than half the hardwood was aspen; other important hardwoods were red oak and hard maple (fig. 3). Jack pine was the major softwood followed by balsam fir and spruce.

Industrial roundwood production from aspen was 32 percent in Michigan, 36 percent in Wisconsin, and 46 percent in Minnesota. Elm constituted 7 percent of the Wisconsin harvest because much elm was being salvaged from Dutch Elm Disease outbreaks. Elm was only 2 percent of Michigan's production because Dutch Elm Disease had peaked there before 1975. Demand for hard maple was high in Michigan.

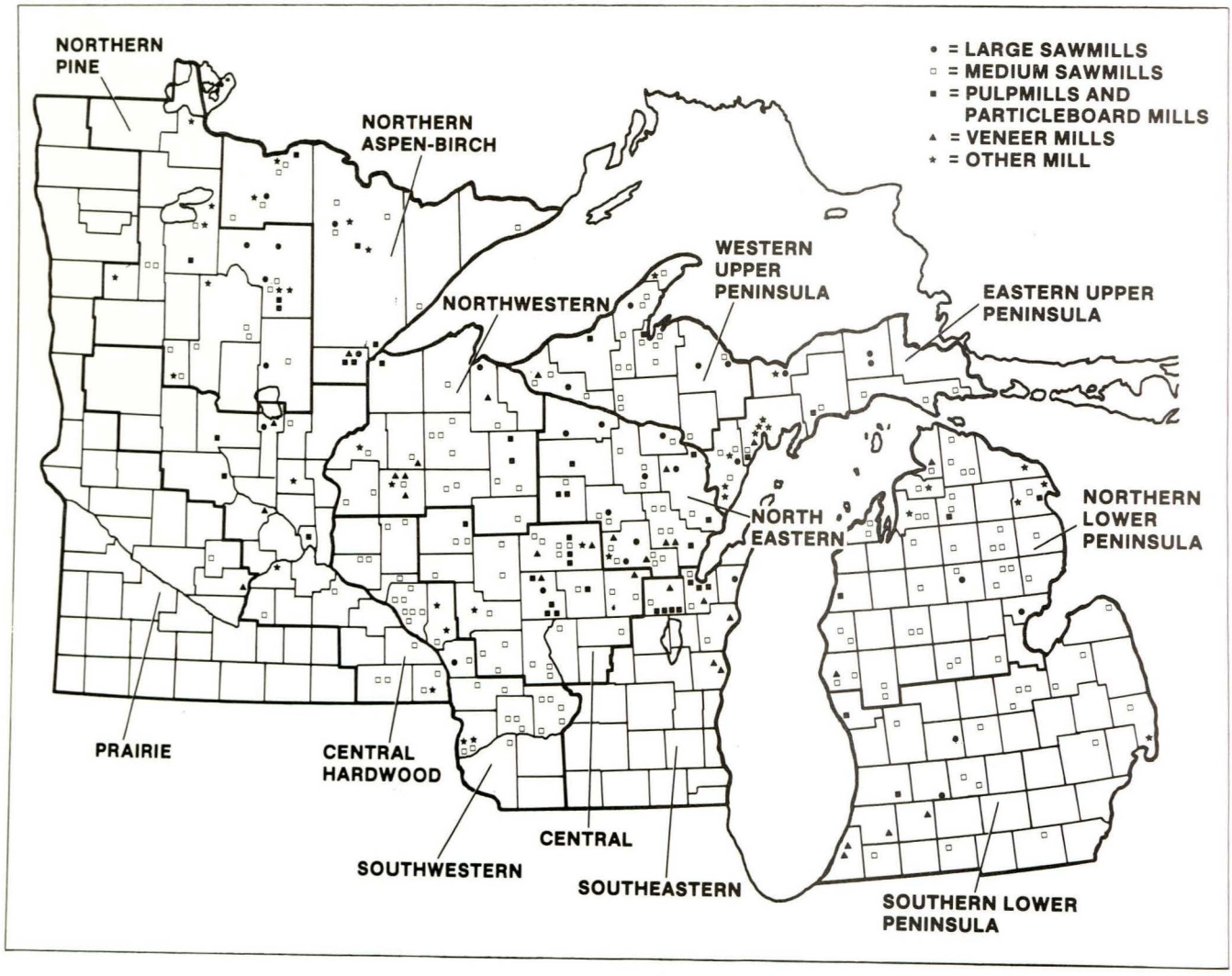

Figure 1.—*Primary wood-using mills and Forest Survey Units in the Lake States, 1975. Sawmills are classed by volume of lumber produced in 1975: large = 5 million board feet or more; medium = 1 to 4.999 million board feet (smaller sawmills not shown).*

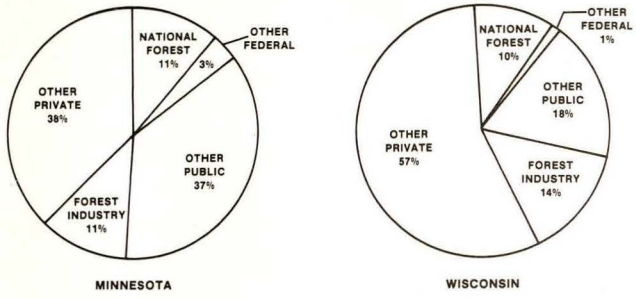

Figure 2.—*Industrial roundwood production by landowner class in Minnesota and Wisconsin, 1975.*

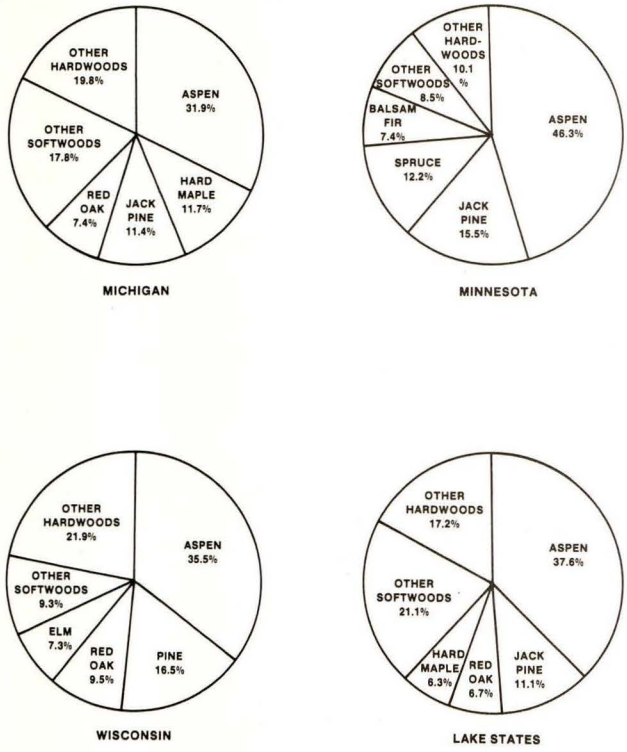

Figure 3.—*Lake States industrial roundwood production by major species, 1975.*

Softwoods are a more important harvest segment in Minnesota (44 percent) than in Michigan (29 percent) or Wisconsin (26 percent). Red and white pine were more significant components of total pine production in Wisconsin than in the other States.

Pulpwood and saw logs are the major industrial wood raw materials in the Lake States (fig. 4). Pulpwood, the dominant product in each State, was particularly important in Minnesota where it accounted for 73 percent of the industrial roundwood cut in 1975.

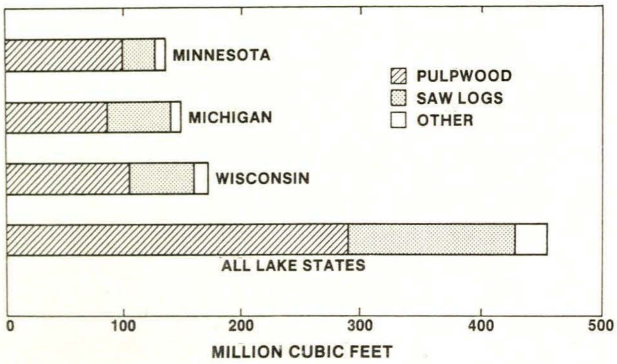

Figure 4.—*Lake States roundwood production by type of product, 1975.*

PULPWOOD

Of the 4.14 million cords of pulpwood produced in 1975, about 89 percent (3.68 million cords) was roundwood (including chips from roundwood); the remainder was wood residue from sawmills, veneer mills, and other mills. Principal species cut for pulpwood were:

Species	Volume *(thousand cords)*
Aspen	1,639
Jack pine	523
Balsam fir	293
Spruce	272
Paper birch	136
Red pine	123
Hard maple	112
Red oak	104

Aspen has been the major Lake States pulpwood species for more than three decades. Use of other hardwoods became significant after World War II. Harvesting of paper birch, an underutilized species, has climbed sharply since 1969.

During the late 1940's, pine, balsam fir, and spruce harvests were each about equal. Since then, pine harvesting has increased and balsam fir and spruce harvesting has decreased. In the 1970's, pine pulpwood production has been greater than the combined output of balsam fir and spruce.

Only minor amounts of wood residue from Lake States mills was used by pulpmills prior to 1959. Since then, use of wood residue from resident mills grew rapidly to 144,000 cords in 1965, then 349,000 cords in 1970, and 468,000 cords in 1975.

Compared to residue, Lake States roundwood use for pulp has grown slower (in percent) and less steadily since 1960. Residue is a highly valued substitute for roundwood at some pulpmills. Some paper companies have purchased or built sawmills that give them a captive supply of residue chips and a more diversified product mix. Sawmills, veneer mills, and pulpmills have jointly profited from rising demand for wood residue in pulp manufacturing.

Due to the closure of a Michigan pulpmill in 1975 during an employee strike, Minnesota produced more pulpwood than Michigan for the first time since 1958. Wisconsin was the top pulpwood producer.

Lake States pulpmills rely primarily on regional producers for their wood requirements. Imports in 1975 from other regions of the United States were 205,000 cords, primarily from western States. Two-thirds of these imports were softwood mill residue chips from South Dakota, Wyoming, Colorado, and Montana.

Wisconsin is heavily dependent on imported pulpwood (38 percent of their wood is from out-of-State) but Michigan is nearly self-sufficient (only 3 percent of their wood is from out-of-State). Imports were not all reported in Minnesota (see Foreword) but were probably between 5 and 15 percent of total demand.

Pulpwood exports from the region, although not fully reported, are minor.

SAW LOGS

Lake States loggers cut 850 million board feet of saw logs in 1975. Most of the output was used in the State where it was cut. Only 4 percent was shipped out-of-State and less than 1 percent was shipped outside the Lake States region.

Four-fifths of the saw log harvest was hardwood. Leading species cut were:

Species	Volume (Million board feet)[1]
Aspen	162.7
Red oak	130.2
Hard maple	124.1
Elm	70.6
White pine	62.9
Jack pine	42.0

Demand for aspen and jack pine saw logs has risen rapidly since 1960. Aspen has found widespread use in pallets, furniture, crating, and construction. Jack pine has developed market acceptance in construction.

Red oak and hard maple are important species for furniture, flooring, railroad ties, and pallets.

Elm harvesting is directly related to the spread of Dutch Elm Disease. For example, Dutch Elm was widespread in Michigan's Lower Peninsula in 1965 when 60.8 million board feet of elm saw logs were cut. In 1975 after the disease had devastated elm in the Lower Peninsula and moved into Wisconsin, the Michigan elm harvest dropped to 15.2 million board feet. The spread of the disease in Wisconsin is reflected by the increased elm harvest from 30.9 million board feet in 1967 to 45.9 million board feet in 1975. Minnesota was relatively untouched by Dutch Elm in 1975 as indicated by a saw log harvest gain of only 600,000 board feet from 1960 to 1975.

Michigan produced the largest volume of saw logs (42 percent), followed by Wisconsin (40 percent), and Minnesota (18 percent). Minnesota produces fewer saw logs because it has less hardwood timber than the other States in some high demand saw log species such as hard maple, red oak, soft maple, and white oak.

Top-producing Counties were Gogebic, Baraga, and Luce in Michigan; Shawano (includes Menominee), Forest, and Marathon in Wisconsin; and Itasca, St. Louis, and Koochiching in Minnesota.

Saw log receipts in the region were 846.6 million board feet including only 1.1 million board feet from other regions and Canada. Wisconsin, the most dependent of the Lake States on log imports, imported 25.0 million board feet of saw logs from Michigan and 3.6 million board feet from Minnesota. Loggers in Michigan's Western Upper Peninsula Unit supplied 23.7 million board feet of saw logs to Wisconsin, primarily to mills in the Northeast Unit which received 23.5 million board feet from Michigan.

Lumber production was highest in the Upper Peninsula of Michigan, northeast Wisconsin, and northeast Minnesota (fig. 5). Lumber output per sawmill has been rising throughout the region. Most new sawmills are larger than the average while those closing are usually small producers. Other mills have become more cost efficient and have developed markets for their wood residues by expanding their production capacity.

OTHER PRODUCTS

Other industrial roundwood products (6 percent of the total) cut in 1975 were posts, poles, mine timbers, and logs and bolts used for veneer, cooperage (barrel staves), excelsior, particleboard, shavings, lath, charcoal, and specialty products. Output of these products was widely scattered in the region.

One-third of the "other products" volume was veneer logs. Wisconsin supplied 52 percent, Michigan 43 percent, and Minnesota 5 percent. Principal veneer species were aspen, red oak, hard maple, elm, and yellow birch. Each State shipped one-third or more of their veneer log production out-of-State, but no State shipped more than 11 percent outside the Lake States region. Primary veneer log production areas were the Western Upper Peninsula Unit in Michigan; the Central Hardwood Unit in Minnesota; and the Northeastern, Northwestern, and Southwestern Units in Wisconsin.

Thirty Lake States veneer mills received 60.7 million board feet of logs in 1975. Only 1.9 million board feet were procured outside the Lake States.

Particleboard bolts, nearly one-fourth of the "other product" volume, were chiefly aspen. Aspen is an excellent particleboard species that was successfully used in Canada before the Lake States. Unlike southern and western particleboard, Lake States particleboard is made primarily from roundwood rather than wood residue from other mills.

Excluding veneer logs, all but minor quantities of "other products" were processed in the Lake States.

[1] *International ¼-inch rule.*

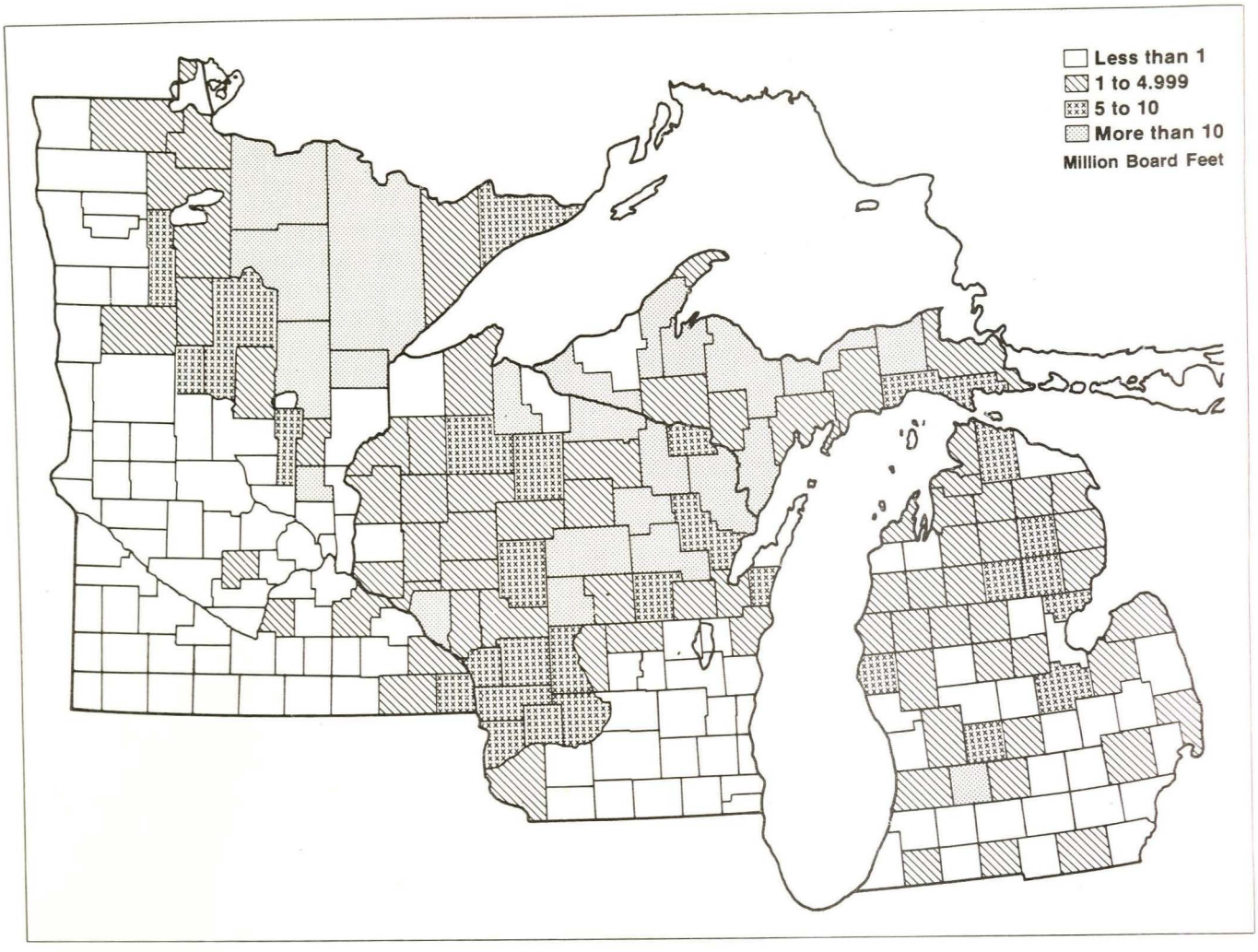

Figure 5.—*Lumber production in Lake States Counties, 1975.*

PRIMARY MILL RESIDUE

During 1975, Lake States primary wood-using mills (except pulpmills) generated approximately 1,156,000 green tons of coarse (chippable) wood residue, 724,000 green tons of fine wood residue, and 531,000 green tons of bark.

The amount of residue not used for products (piled, land fill, burned as waste, etc.) was:

Class of residue	Softwood	Hardwood
	(Percent)	
Coarse	*16*	*8*
Fine	*39*	*34*
Bark	*44*	*39*

Demand was good for coarse residue throughout the region—pulpwood was the main use. Markets for fine and bark residue were satisfactory in Wisconsin and poor in Minnesota and Michigan. Fuelwood was an important use for fine and bark residue in all States. A third of the fine hardwood residue was marketed for mulch, poultry litter, livestock bedding, and similar uses.

OUTLOOK

Markets for paper birch will improve. Large surpluses of paper birch are located throughout the Lake States, and opportunities are developing to substitute birch for other species. One potential market for paper birch is in particleboard.

Particleboard production will increase. Several new waferboard plants have recently been announced for Minnesota, and one is under construction

in Wisconsin. Waferboard is a special type of particleboard using wood wafers engineered to a specific size in place of random-sized particles. Aspen is the preferred species in the new plants. As manufacturing technology improves and the aspen supply-demand situation tightens, paper birch and other hardwoods in surplus supply will probably be used in Lake States waferboard.

Cedar, another underutilized species, doesn't appear to have many opportunities to further penetrate existing markets or enter new markets by 1985. However, technological breakthroughs in pulping cedar could drastically change this outlook.

High demand for railroad ties until 1985 or beyond is likely to strengthen the overall market for oak even during periods of economic slowdown.

Use of elm in Wisconsin is declining but will rise in Minnesota as Dutch Elm Disease spreads through the State. Most of the Minnesota diseased elm will be used for saw logs, veneer logs, and fuelwood. Pulpwood will not be a major market outlet for Minnesota elm unless out-of-State pulpmills decide to procure more.

Whole tree chips, a minor source of pulpwood in 1975, will probably increase in use slowly for the next few years. Their use may increase faster if harvesting systems are further refined to economically produce joint products—"clean" pulpwood chips and "barky" fuelwood chips.

Undoubtedly, use of bark and fine residue for fuel and other uses has climbed substantially since 1975. Finding markets for any type of wood or bark residue at primary mills is likely to be a minor problem by 1981. Use of wood and bark residue for fuel should continue to increase and may compete more vigorously with other uses of this residue as the quantity of unused residue shrinks.

APPENDIX

STUDY METHODS

Data for this publication came from a complete canvass (with formal questionnaires) of primary wood-using firms using Lake States logs and bolts and all public agencies administering forest land in Minnesota and Wisconsin. Public agencies were not canvassed in Michigan. The study was a cooperative effort between the Departments of Natural Resources (DNR's) in Michigan, Minnesota, and Wisconsin and the North Central Forest Experiment Station (NCFES). Special thanks are given to the forestry staffs of the DNR's in each State for canvassing the mills in their respective States and also to the Resources Evaluation field crews of the NCFES for personally canvassing many mills in northeastern Minnesota. The DNR's made estimates, based on past studies and knowledge, for a few mills refusing to respond or that were out of business at the time of interview.

The Minnesota and Wisconsin DNR's canvassed public agencies (other than Federal) to determine the 1975 timber products harvest on land they administer.

The NCFES canvassed out-of-State mills using Lake States roundwood and the Federal agencies. The Station edited and compiled the data.

The NCFES canvassed railroads serving Minnesota to determine for 1975 the number of cars loaded with logs at Minnesota shipping points and destined for Great Lakes or ocean ports. From these reports, the Station estimated the volume of logs exported overseas from Minnesota. Log exports overseas from Michigan and Wisconsin were not determined.

DEFINITION OF TERMS

Industrial roundwood products.—Saw logs, pulpwood, veneer logs, poles, commercial posts, piling, particleboard bolts, excelsior bolts, lath bolts, charcoal bolts, cooperage logs, shaving bolts, bolts for specialty products, and chips from roundwood.

Primary wood-using plant residue.—Wood materials (coarse and fine) and bark not utilized for principal products at manufacturing plants using

roundwood. This residue includes wood products (by-products) obtained incidental to production of principal products and wood materials not utilized for some product.

Coarse plant residue.—Wood residue suitable for chipping such as slabs, edgings, and veneer cores.

Fine plant residue.—Wood residue not suitable for chipping, such as sawdust and veneer clippings.

Production (output).—The annual quantity, determined from mill receipts, of one or a group of roundwood products cut in a specific geographic area, plus the annual wood residue quantity produced by sawmills, veneer mills, etc., in a specific geographic area that was used for the product.

Receipts.—The annual quantity of wood received by mills in a specific geographic area, regardless of the geographic source.

Primary wood-using mills.—Mills receiving roundwood or chips from roundwood.

COMMON AND SCIENTIFIC NAMES OF TREE SPECIES MENTIONED

SOFTWOODS:

Eastern white pine ..... *Pinus strobus*
Red pine ..... *Pinus resinosa*
Jack pine ..... *Pinus banksiana*

Spruce:
- White spruce ..... *Picea glauca*
- Black spruce ..... *Picea mariana*

Balsam fir ..... *Abies balsamea*
Eastern hemlock ..... *Tsuga canadensis*
Tamarack ..... *Larix laricina*
Northern white-cedar ..... *Thuja occidentalis*

HARDWOODS:

White oak:
- White oak ..... *Quercus alba*
- Bur oak ..... *Quercus macrocarpa*
- Chinkapin oak ..... *Quercus muehlenbergii*
- Swamp white oak ..... *Quercus bicolor*

Red oak:
- Northern red oak ..... *Quercus rubra*
- Black oak ..... *Quercus velutina*
- Pin oak ..... *Quercus palustris*

Hickory:
- Bitternut hickory ..... *Carya cordiformis*
- Pignut hickory ..... *Carya glabra*
- Shagbark hickory ..... *Carya ovata*

Yellow birch ..... *Betula alleghaniensis*

Hard maple:
- Black maple ..... *Acer nigrum*
- Sugar maple ..... *Acer saccharum*

Soft maple:
- Red maple ..... *Acer rubrum*
- Silver maple ..... *Acer saccharinum*

American beech ..... *Fagus grandifolia*

Ash:
- Black ash ..... *Fraxinus nigra*
- White ash ..... *Fraxinus americana*

Balsam poplar ..... *Populus balsamifera*

Aspen:
- Bigtooth aspen ..... *Populus grandidentata*
- Quaking aspen ..... *Populus tremuloides*

Eastern cottonwood ..... *Populus deltoides*

American basswood ..... *Tilia americana*
Black walnut ..... *Juglans nigra*

Elm:
- American elm ..... *Ulmus americana*
- Rock elm ..... *Ulmus thomasii*
- Slippery elm ..... *Ulmus rubra*

Paper birch ..... *Betula papyrifera*

Table 1.—*Lake States industrial roundwood production by product and State, 1975*

Product	Standard units	All species	Soft-woods	Hard-woods	All species	Soft-woods	Hard-woods
		-------Thousand standard units-------			---------Thousand cubic feet ---------		
ALL LAKE STATES							
Pulpwood	Standard cords	3,676	1,400	2,276	290,230	110,510	179,720
Saw logs	Board feet	850,045	174,076	675,969	137,985	29,730	108,255
Veneer logs[1]	Board feet	60,987	18	60,969	9,194	2	9,192
Posts[2]	Pieces	5,396	5,396	0	5,140	5,140	0
Cooperage logs	Board feet	3,284	0	3,284	451	0	451
Poles	Pieces	132	132	0	861	861	0
Miscellaneous[3]	Cubic feet	11,778	506	11,272	11,455	506	10,949
Total					455,316	146,749	308,567
MICHIGAN							
Pulpwood	Standard cords	1,098	409	689	86,682	32,287	54,395
Saw logs	Board feet	359,236	49,905	309,331	53,921	7,554	46,367
Veneer logs	Board feet	26,079	0	26,079	3,575	0	3,575
Posts[2]	Pieces	3,083	3,083	0	3,169	3,169	0
Cooperage logs	Board feet	0	0	0	0	0	0
Poles	Pieces	21	21	0	177	177	0
Miscellaneous[3]	Cubic feet	1,256	312	944	1,256	312	944
Total					148,780	43,499	105,281
MINNESOTA							
Pulpwood	Standard cords	1,251	578	673	98,834	45,675	53,159
Saw logs	Board feet	156,123	60,923	95,200	28,233	11,261	16,972
Veneer logs[1]	Board feet	3,216	0	3,216	503	0	503
Posts[2]	Pieces	1,752	1,752	0	1,407	1,407	0
Cooperage logs	Board feet	916	0	916	128	0	128
Poles	Pieces	103	103	0	618	618	0
Miscellaneous[3]	Cubic feet	5,990	190	5,800	5,990	190	5,800
Total					135,713	59,151	76,562
WISCONSIN							
Pulpwood	Standard cords	1,327	413	914	104,714	32,548	72,166
Saw logs	Board feet	334,686	63,248	271,438	55,831	10,915	44,916
Veneer logs	Board feet	31,692	18	31,674	5,116	2	5,114
Posts[2]	Pieces	561	561	0	564	564	0
Cooperage logs	Board feet	2,368	0	2,368	323	0	323
Poles	Pieces	8	8	0	66	66	0
Miscellaneous[3]	Cubic feet	4,532	4	4,528	4,209	4	4,205
Total					170,823	44,099	126,724

[1]Does not include specialty veneer logs harvested for Diamond International Corp., Cloquet, MN. These logs are included in "miscellaneous" category to avoid disclosure of confidential mill data.

[2]Includes only posts processed at fence and treating plants.

[3]Includes logs and bolts used for excelsior, shavings, particleboard, lath, charcoal, and specialty products.

Table 2.—*Industrial roundwood products output by landowner class and Unit, Minnesota and Wisconsin, 1975*
(In thousand cubic feet)

MINNESOTA

Unit	Federal				Other public		Private				All owners	
	National Forest		Other				Forest industry[1]		Other			
	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood	Soft-wood	Hard-wood
Northern Aspen-Birch	6,172	4,268	397	491	12,819	13,282	5,197	5,495	11,514	11,275	36,099	34,811
Northern Pine	1,740	2,986	2,101	1,069	11,339	11,755	2,430	2,209	4,907	14,288	22,517	32,307
Central Hdwd.	0	0	6	274	53	694	0	0	441	7,528	500	8,496
Prairie	0	0	0	0	([2])	3	0	0	35	945	35	948
All units	7,912	7,254	2,504	1,834	24,211	25,734	7,627	7,704	16,897	34,036	59,151	76,562
WISCONSIN												
Northeastern	2,726	6,123	105	461	1,433	9,754	5,586	8,114	7,811	24,189	17,661	48,641
Northwestern	2,303	5,567	60	388	4,153	12,266	1,813	4,613	6,185	19,339	14,514	42,173
Central	0	0	248	90	1,668	1,338	2,837	349	6,006	17,513	10,759	19,290
Southwestern	0	0	0	0	37	5	0	100	468	12,904	505	13,009
Southeastern	0	0	0	0	52	32	12	129	596	3,450	660	3,611
All units	5,029	11,690	413	939	7,343	23,395	10,248	13,305	21,066	77,395	44,099	126,724

[1]Primary wood-using firms owning forest land, except sawmills cutting less than 100,000 board feet annually.
[2]Less than 500 cubic feet.

Table 3.—*Michigan industrial roundwood production by Unit and species, 1975*
(In thousand cubic feet)

Species	All units	Eastern Upper Peninsula	Western Upper Peninsula	Northern Lower Peninsula	Southern Lower Peninsula
SOFTWOODS:					
Cedar	3,573	2,396	512	665	0
Balsam fir	6,320	2,973	2,749	598	0
Hemlock	5,799	1,511	4,182	99	7
Jack pine	16,982	3,937	1,591	11,251	203
Red pine	3,614	921	483	1,730	480
White pine	2,990	1,184	1,303	445	58
Spruce	3,884	1,526	2,218	140	0
Tamarack	337	146	191	0	0
Total	43,499	14,594	13,229	14,928	748
HARDWOODS					
Ash	1,934	133	345	766	690
Aspen	47,503	6,322	15,881	24,814	486
Balsam poplar	832	212	133	456	31
Basswood	2,490	349	648	1,039	454
Beech	3,260	2,046	108	657	449
Paper birch	3,706	737	985	1,967	17
Yellow birch	2,359	610	1,660	82	7
Cottonwood	1,004	0	0	401	603
Elm	3,527	1,231	1,644	475	177
Hickory	315	8	0	104	203
Hard maple	17,345	4,642	9,705	1,897	1,101
Soft maple	7,690	1,153	1,403	4,054	1,080
Red oak	10,972	34	535	7,988	2,415
White oak	1,817	16	0	797	1,004
Walnut	158	0	0	0	158
Other hardwoods	369	34	80	181	74
Total	105,281	17,527	33,127	45,678	8,949
All species	148,780	32,121	46,356	60,606	9,697

Table 4.—*Minnesota industrial roundwood production by Unit and species, 1975*
(In thousand cubic feet)

Species	All units	Northern Aspen-Birch	Northern Pine	Central Hardwood	Prairie
SOFTWOODS:					
Cedar	1,078	946	131	1	0
Balsam fir	9,983	6,255	3,724	4	0
Hemlock	0	0	0	0	0
Jack pine	21,047	11,136	9,497	414	0
Red pine	3,492	1,324	2,120	48	0
White pine	2,527	1,616	890	21	0
Spruce	16,561	12,403	4,155	3	0
Tamarack	4,463	2,419	2,000	9	35
Total	59,151	36,099	22,517	500	35
HARDWOODS:					
Ash	690	83	429	142	36
Aspen	62,866	31,495	27,860	3,509	2
Balsam poplar	1,070	878	106	86	0
Basswood	893	23	357	460	53
Beech	0	0	0	0	0
Paper birch	4,018	2,070	1,813	135	0
Yellow birch	3	2	1	0	0
Cottonwood	612	0	0	174	438
Elm	1,835	15	555	821	308
Hickory	13	0	0	13	0
Hard maple	226	4	49	160	13
Soft maple	158	4	47	84	23
Red oak	3,341	101	933	2,275	32
White oak	758	0	157	569	32
Walnut	61	0	0	50	11
Other hardwoods	18	0	0	18	0
Total	76,562	34,811	32,307	8,496	948
All species	135,713	70,910	54,824	8,996	983

Table 5.—*Wisconsin industrial roundwood production by Unit and species, 1975*
(In thousand cubic feet)

Species	All units	Northeastern	Northwestern	Central	Southwestern	Southeastern
SOFTWOODS:						
Cedar	445	411	12	1	0	21
Balsam fir	8,137	5,108	2,954	75	0	0
Hemlock	4,602	3,255	1,075	255	0	17
Jack pine	12,656	2,041	4,400	5,964	67	184
Red pine	8,777	2,454	2,469	3,274	383	197
White pine	6,807	2,772	2,610	1,129	55	241
Spruce	2,392	1,485	877	30	0	0
Tamarack	283	135	117	31	0	0
Total	44,099	17,661	14,514	10,759	505	660
HARDWOODS:						
Ash	3,304	963	1,241	748	194	158
Aspen	60,695	27,233	27,815	5,198	359	90
Balsam poplar	37	18	0	0	0	19
Basswood	4,122	1,192	1,095	764	903	168
Beech	260	185	0	4	0	71
Paper birch	6,689	2,925	3,247	403	83	31
Yellow birch	1,721	842	596	269	11	3
Cottonwood	229	5	2	11	145	66
Elm	12,397	5,711	1,980	3,240	737	729
Hickory	335	64	4	21	238	8
Hard maple	11,190	5,794	2,633	1,573	1,003	187
Soft maple	5,179	1,553	1,363	1,391	468	404
Red oak	16,239	1,795	1,964	4,631	6,821	1,028
White oak	3,774	151	175	961	1,906	581
Walnut	178	1	15	0	117	45
Other hardwoods	375	209	43	76	24	23
Total	126,724	48,641	42,173	19,290	13,009	3,611
All species	170,823	66,302	56,687	30,049	13,514	4,271

Table 6.—*Active primary wood-using mills in the Lake States, by State, 1975*
(In numbers)

Type of mill	Michigan	Minnesota	Wisconsin	Total
Pulp mill	8	9	24	41
Saw Mill:				
Large[1]	12	8	12	32
Medium[2]	76	29	86	191
Small[3]	174	162	216	552
Total	262	199	314	775
Veneer mill:				
Standard grade	3	2	9	14
Container	5	2	10	17
Total	8	4	19	31
Other[4]	15	17	10	42
Total	293	229	367	889

[1]Annual lumber production of 5 million board feet or more.
[2]Annual lumber production of 1 million to 4.999 million board feet.
[3]Annual lumber production of less than 1 million board feet.
[4]Includes fence, treating, particleboard, cabin log, charcoal, lath, cooperage, shavings, excelsior, and specialty product plants.

Table 7.—*Lake States pulpwood production by State, species group, and destination, 1975*
(In thousand standard cords, unpeeled)

Species group	Destination of wood				
	Michigan	Minnesota	Wisconsin	Other States and Canada	Total
MICHIGAN					
ROUNDWOOD:[1]					
Balsam fir	18	0	53	3	74
Pine	165	0	70	0	235
Spruce	6	0	37	2	45
Other softwoods	23	0	32	0	55
Aspen	286	0	150	0	436
Birch	32	0	4	0	36
Maple	70	0	32	0	102
Oak	59	0	(2)	0	59
Other hardwoods	40	0	16	0	56
Total	699	0	394	5	1,098
RESIDUE:					
Softwood	8	0	12	2	22
Hardwood	107	0	43	10	160
All material	814	0	449	17	1,280
MINNESOTA[3]					
ROUNDWOOD:[1]					
Balsam fir	0	116	4	1	121
Pine	0	154	42	3	199
Spruce	0	163	38	1	202
Other softwoods	0	31	25	0	56
Aspen	0	548	66	2	616
Birch	0	33	2	0	35
Other hardwoods	0	21	1	0	22
Total	0	1,066	178	7	1,251
RESIDUE:					
Softwood	0	43	(2)	1	44
Hardwood	0	64	(2)	0	64
All material	0	1,173	178	8	1,359
WISCONSIN					
ROUNDWOOD:[1]					
Balsam fir	1	0	97	0	98
Pine	3	0	237	0	240
Spruce	(2)	0	25	0	25
Other softwoods	3	0	46	0	49
Aspen	3	10	575	(2)	588
Birch	1	0	82	(2)	83
Maple	1	0	98	1	100
Oak	(2)	0	48	1	49
Other hardwoods	(2)	0	94	1	95
Total	12	10	1,302	3	1,327
RESIDUE:					
Softwood	(2)	0	36	0	36
Hardwood	7	10	122	3	142
All material	19	20	1,460	6	1,505

[1]Includes chips from roundwood.
[2]Less than 500 cords.
[3]Some Minnesota wood sent to Canada is reported as remaining in Minnesota to protect confidentiality of wood use at individual mills.

Table 8.—*Lake States pulpwood production from roundwood by county and species, 1975*

(In standard cords, unpeeled)

MICHIGAN

UNIT AND COUNTY 1/	BALSAM FIR	CEDAR	HEMLOCK	JACK PINE	RED PINE	WHITE PINE	SPRUCE	TAMARACK	ASH	ASPEN	BALSAM POPLAR	BASSWOOD
E. UPPER PENINSULA												
ALGER	485	251	2260	9904	1618	816	157	44	16	978	188	63
CHIPPEWA	2413	161	689	4416	520	377	1223	303	15	5026	267	50
DELTA	12063	430	4427	8108	1688	759	4588	105	158	20450	348	124
LUCE	4208	239	1222	12724	1482	823	2751	130	89	2936	297	99
MACKINAC	1742	273	1143	2782	527	342	459	56	23	3140	245	81
MENOMINEE	10972	82	1814	988	204	96	5788	322	616	30913	161	59
SCHOOLCRAFT	3819	518	4479	8351	1453	1034	3328	165	49	5093	469	156
TOTAL	35702	1954	16034	47273	7492	4247	18294	1125	966	68536	1975	632
W. UPPER PENINSULA												
BARAGA	1019	128	5058	1355	261	325	854	78	133	23748	392	131
DICKINSON	4014	116	967	1409	187	261	2732	550	85	34976	225	78
GOGEBIC	1737	14	11932	736	101	39	1909	50	174	18026	0	80
HOUGHTON	1578	38	2252	736	88	70	643	6	47	3246	33	15
IRON	16230	97	3577	2518	1015	334	11633	156	856	28907	197	281
KEWEENAW	593	0	178	0	0	0	592	0	0	0	0	0
MARQUETTE	7682	478	6509	11608	1545	1617	6522	316	102	9894	809	274
ONTONAGON	684	93	3696	256	113	183	157	15	772	18981	14	6
TOTAL	33537	964	34169	18618	3310	2829	25042	1171	2169	137778	1670	865
N. LOWER PENINSULA												
ALCONA	391	0	0	378	0	0	130	0	440	18758	844	444
ALPENA	738	0	0	222	22	0	238	0	560	6405	355	559
BENZIE	0	0	0	0	0	0	0	0	104	6974	0	0
CHEBOYGAN	694	0	0	2779	0	0	326	0	500	14196	779	488
CLARE	0	0	0	2895	0	0	0	0	85	11329	25	68
CRAWFORD	0	0	0	11905	285	150	0	0	0	695	0	0
EMMET	0	0	0	474	0	0	0	0	0	0	0	0
GLADWIN	0	0	0	877	0	0	0	0	53	8037	148	0
GRAND TRAVERSE	0	0	0	757	0	0	0	0	42	3286	0	0
IOSCO	0	0	0	14559	0	0	0	0	20	1642	141	22
ISABELLA	0	0	0	0	0	0	0	0	59	5335	27	48
KALKASKA	0	0	0	1898	0	0	0	0	14	2487	0	0
LAKE	0	0	0	13186	0	0	0	0	784	9820	204	542
LEELANAU	0	0	0	0	444	0	0	0	104	2704	0	0
MANISTEE	0	0	0	3561	0	0	0	0	484	10545	75	81
MASON	0	0	0	0	939	0	0	0	328	5241	36	157
MECOSTA	0	0	0	0	2467	0	0	0	198	9208	79	236
MIDLAND	0	0	0	0	0	0	0	0	0	492	0	0
MISSAUKEE	0	0	0	0	738	0	0	0	208	8008	0	0
MONTMORENCY	977	0	0	14207	0	0	369	0	414	22626	734	430
NEWAYGO	0	0	0	0	4308	0	0	0	1040	8136	369	931
OCEANA	0	0	0	0	2196	0	0	0	9	3458	53	2
OGEMAW	0	0	0	6873	0	0	0	0	20	2355	44	22
OSCEOLA	0	0	0	0	2595	0	0	0	634	12289	268	791
OSCODA	86	0	0	15889	0	0	22	0	323	25440	555	222
OTSEGO	0	0	0	2539	0	0	0	0	0	603	0	0
PRESQUE ISLE	1454	0	0	7568	0	0	694	0	320	11359	555	333
ROSCOMMON	0	0	0	6684	0	0	0	0	32	7970	0	0
WEXFORD	0	0	0	21406	0	0	0	0	28	8452	0	0
TOTAL	4340	0	0	128657	13994	150	1779	0	6803	227850	5291	5376
S. LOWER PENINSULA												
ALLEGAN	0	0	0	315	0	0	0	0	6	372	0	2
CASS	0	0	0	0	328	0	0	0	0	94	0	0
GRATIOT	0	0	0	322	0	0	0	0	5	104	0	2
IONIA	0	0	0	0	318	0	0	0	0	0	0	0
KALAMAZOO	0	0	0	0	0	0	0	0	22	40	1	6
KENT	0	0	0	1930	0	0	0	0	1	34	0	0
MONTCALM	0	0	0	0	744	0	0	0	138	707	10	49
MUSKEGON	0	0	0	0	3830	0	0	0	2	14	0	0
OTTAWA	0	0	0	0	581	0	0	0	0	0	0	0
TOTAL	0	0	0	2567	5801	0	0	0	174	1365	11	59
STATE TOTAL	73579	2918	50203	197115	30597	7226	45115	2296	10112	435529	8947	6932

1/ INCLUDES ONLY THOSE COUNTIES THAT SUPPLIED PULPWOOD IN 1975.

(TABLE 8 CONTINUED ON NEXT PAGE)

(TABLE 8 CONTINUED)

MICHIGAN

UNIT AND COUNTY 1/	BEECH	WHITE BIRCH	YELLOW BIRCH	COTTON-WOOD	ELM	HICKORY	HARD MAPLE	SOFT MAPLE	RED OAK	WHITE OAK	OTHER HARD-WOODS	ALL SPECIES
E. UPPER PENINSULA												
ALGER	809	244	156	0	94	0	657	528	6	0	9	19283
CHIPPEWA	521	280	126	0	76	0	424	366	4	0	6	17263
DELTA	1047	835	327	0	381	0	1087	1031	51	0	24	58031
LUCE	1178	772	331	0	268	0	1426	938	37	1	13	31964
MACKINAC	756	528	204	0	122	0	686	585	8	0	10	13712
MENOMINEE	1017	481	159	0	5012	115	5319	1776	17	0	9	65920
SCHOOLCRAFT	1715	823	395	0	239	0	1385	1389	13	0	20	34893
TOTAL	7043	3963	1698	0	6192	115	10984	6613	136	1	91	241066
W. UPPER PENINSULA												
BARAGA	0	596	438	0	485	0	3397	1080	70	0	35	39583
DICKINSON	0	465	202	0	219	0	892	431	17	0	7	47833
GOGEBIC	0	547	316	0	1307	0	2928	620	0	0	317	40833
HOUGHTON	0	250	189	0	75	0	1040	249	2	0	3	10560
IRON	0	744	1070	0	3907	0	11228	2306	13	0	452	85521
KEWEENAW	0	0	0	0	0	0	0	0	0	0	0	1363
MARQUETTE	2	972	695	0	483	0	4798	1663	72	0	17	56058
ONTONAGON	0	794	1016	0	2771	0	8775	2165	375	0	1	40867
TOTAL	2	4368	3926	0	9247	0	33058	8514	549	0	832	322618
N. LOWER PENINSULA												
ALCONA	20	1182	0	0	22	0	20	2554	9425	457	0	35065
ALPENA	52	671	6	4	45	0	124	1631	1299	49	6	12986
BENZIE	312	759	10	0	0	0	208	2600	1314	104	208	12593
CHEBOYGAN	20	2606	0	0	0	0	20	1976	73	0	0	24457
CLARE	89	739	10	8	0	1	135	1464	1908	148	15	18919
CRAWFORD	0	0	0	0	0	0	0	208	211	0	0	13454
EMMET	0	0	0	0	0	0	0	0	0	0	0	474
GLADWIN	156	834	0	104	0	0	54	1059	1306	72	52	12752
GRAND TRAVERSE	42	529	0	0	0	0	208	520	1144	37	21	6586
IOSCO	0	402	0	0	0	0	0	408	45	0	0	17239
ISABELLA	31	163	9	8	0	1	97	102	21	32	12	5945
KALKASKA	52	221	0	0	0	0	3	803	633	21	0	6132
LAKE	490	1373	62	86	0	12	971	3956	4869	2405	241	39001
LEELANAU	104	219	15	0	0	0	104	156	104	0	42	3996
MANISTEE	477	903	63	9	0	2	777	3230	5200	688	384	26479
MASON	211	335	24	21	0	6	436	2809	1213	410	249	12415
MECOSTA	174	593	37	28	0	7	521	359	398	294	57	14656
MIDLAND	0	0	0	0	0	0	0	0	0	0	0	492
MISSAUKEE	104	732	0	0	0	0	52	836	1053	2	104	11837
MONTMORENCY	88	939	25	14	22	3	327	1385	3639	146	32	46377
NEWAYGO	650	1151	140	123	0	27	1659	1922	3313	1615	273	25657
OCEANA	20	171	0	0	0	0	18	120	984	151	1	7183
OGEMAW	0	85	0	0	0	0	20	348	684	0	0	10451
OSCEOLA	557	1248	113	89	0	23	1540	1034	1805	351	180	23517
OSCODA	67	2113	0	0	0	0	40	2559	6027	237	0	53580
OTSEGO	0	29	0	0	0	0	0	208	176	0	0	3555
PRESQUE ISLE	20	2943	0	0	22	0	20	1903	110	0	0	27301
ROSCOMMON	73	310	0	0	0	0	21	258	2620	41	0	18009
WEXFORD	52	471	0	0	0	0	35	337	630	70	26	31507
TOTAL	3861	21721	514	494	111	82	7410	34745	50204	7330	1903	522615
S. LOWER PENINSULA												
ALLEGAN	2	1	0	3	0	4	6	12	274	12	4	1013
CASS	0	0	0	0	0	0	0	1	6		0	431
GRATIOT	2	1	0	2	0	2	3	9	8			470
IONIA	0	0	0	0	0	0	0	0	0	0	0	318
KALAMAZOO	6	2	1	5	0	12	12	34	0	31	14	186
KENT	0	1	0	0	0	0	2	11	50	19	0	2048
MONTCALM	51	33	7	41	0	88	129	298	230	295	94	2914
MUSKEGON	0	4	0	0	0	0	4	19	117	46	0	4036
OTTAWA	0	0	0	0	0	0	0	0	0	0	0	581
TOTAL	61	42	8	51	0	106	156	384	685	412	115	11997
STATE TOTAL	10967	30094	6146	545	15550	303	51608	50256	51574	7743	2941	1098296

1/ INCLUDES ONLY THOSE COUNTIES THAT SUPPLIED PULPWOOD IN 1975.

(TABLE 8 CONTINUED ON NEXT PAGE)

(TABLE 8 CONTINUED)

MINNESOTA

UNIT AND COUNTY 1/	BALSAM FIR	CEDAR	HEMLOCK	JACK PINE	RED PINE	WHITE PINE	SPRUCE	TAMARACK	ASH	ASPEN	BALSAM POPLAR	BASSWOOD
NORTHERN ASPEN-BIRCH												
CARLTON	524	0	0	1938	500	0	262	259	0	17338	0	0
COOK	1479	0	0	3780	74	0	8447	0	0	15915	0	0
KOOCHICHING	39643	0	0	12558	1823	2540	75689	23458	0	126238	6107	0
LAKE	12009	0	0	21052	950	0	24670	68	0	13420	0	0
ST.LOUIS	22796	0	0	64191	3429	3688	43795	6842	0	184212	3701	0
TOTAL	76451	0	0	103519	6776	6228	152863	30627	0	357123	9808	0
NORTHERN PINE												
AITKIN	662	0	0	1333	0	0	1468	4113	0	34528	0	0
BECKER	0	0	0	925	0	0	0	69	0	760	0	0
BELTRAMI	12819	0	0	10865	843	404	8709	5027	0	48843	12	0
CASS	2509	0	0	14926	1291	12	1013	972	45	25038	0	0
CLEARWATER	1609	0	0	6639	139	0	4326	6747	10	6752	0	0
CROW WING	0	0	0	4554	500	0	0	300	0	9248	0	0
HUBBARD	286	0	0	8713	500	0	492	1010	0	31572	0	0
ITASCA	26057	0	0	7399	741	742	16055	5312	0	56522	220	0
LAKE OF THE WOODS	611	0	0	2397	0	0	11361	299	0	13218	662	0
MAHNOMEN	0	0	0	1184	0	0	29	152	0	760	0	0
ROSEAU	292	0	0	9970	0	0	5688	1069	0	7590	23	0
WADENA	0	0	0	4600	0	0	0	0	0	1415	0	0
TOTAL	44845	0	0	73505	4014	1158	49141	25070	55	236246	917	0
CENTRAL HARDWOOD												
BENTON	0	0	0	0	0	0	0	0	0	129	0	0
KANABEC	0	0	0	0	0	0	0	0	0	916	0	0
MILLE LACS	0	0	0	0	0	0	0	85	0	7012	0	0
MORRISON	0	0	0	1139	0	0	0	0	0	6341	0	0
OTTERTAIL	0	0	0	570	0	0	0	0	0	0	0	0
PINE	0	0	0	1240	0	0	0	27	0	8228	0	0
TODD	0	0	0	570	0	0	0	0	0	0	0	0
TOTAL	0	0	0	3519	0	0	0	112	0	22626	0	0
PRAIRIE												
POLK	0	0	0	0	0	0	0	457	0	0	0	0
TOTAL	0	0	0	0	0	0	0	457	0	0	0	0
STATE TOTAL	121296	0	0	180543	10790	7386	202004	56266	55	615995	10725	0

1/ INCLUDES ONLY THOSE COUNTIES THAT SUPPLIED PULPWOOD IN 1975.

(TABLE 8 CONTINUED ON NEXT PAGE)

(TABLE 8 CONTINUED)

MINNESOTA

UNIT AND COUNTY 1/	BEECH	WHITE BIRCH	YELLOW BIRCH	COTTON-WOOD	ELM	HICKORY	HARD MAPLE	SOFT MAPLE	RED OAK	WHITE OAK	OTHER HARD-WOODS	ALL SPECIES
NORTHERN ASPEN-BIRCH												
CARLTON	0	3133	0	0	0	0	19	8	376	0	0	24357
COOK	0	0	0	0	0	0	0	0	0	0	0	29695
KOOCHICHING	0	2947	0	0	692	0	14	17	693	0	0	292419
LAKE	0	2036	0	0	0	0	0	0	0	0	0	74205
ST.LOUIS	0	7682	0	0	0	0	8	35	0	0	0	340379
TOTAL	0	15798	0	0	692	0	41	60	1069	0	0	761055
NORTHERN PINE												
AITKIN	0	2515	0	0	0	0	0	0	5541	0	0	50160
BECKER	0	0	0	0	0	0	0	0	0	0	0	1754
BELTRAMI	0	5989	0	0	0	0	57	3	0	0	0	93571
CASS	0	2915	3	0	24	0	34	8	0	0	2	48792
CLEARWATER	0	1002	0	0	17	0	44	3	0	0	0	27288
CROW WING	0	469	0	0	0	0	0	0	275	0	0	15346
HUBBARD	0	1371	0	0	0	0	0	0	0	0	0	43944
ITASCA	0	2614	0	0	0	0	24	5	0	0	0	115691
LAKE OF THE WOODS	0	0	0	0	0	0	0	0	0	0	0	28548
MAHNOMEN	0	460	0	0	0	0	0	0	0	0	0	2585
ROSEAU	0	500	0	0	0	0	0	0	0	0	0	25132
WADENA	0	390	0	0	0	0	0	0	0	0	0	6405
TOTAL	0	18225	3	0	41	0	159	19	5816	0	2	459216
CENTRAL HARDWOOD												
BENTON	0	0	0	0	0	0	0	0	0	0	0	129
KANABEC	0	173	0	0	0	0	0	0	690	0	0	1779
MILLE LACS	0	359	0	0	0	0	0	0	1438	0	0	8894
MORRISON	0	173	0	0	0	0	0	0	690	0	0	8343
OTTERTAIL	0	0	0	0	0	0	0	0	0	0	0	570
PINE	0	746	0	0	0	0	0	0	0	0	0	10241
TODD	0	0	0	0	0	0	0	0	0	0	0	570
TOTAL	0	1451	0	0	0	0	0	0	2818	0	0	30526
PRAIRIE												
POLK	0	0	0	0	0	0	0	0	0	0	0	457
TOTAL	0	0	0	0	0	0	0	0	0	0	0	457
STATE TOTAL	0	35474	3	0	733	0	200	79	9703	0	2	1251254

1/ INCLUDES ONLY THOSE COUNTIES THAT SUPPLIED PULPWOOD IN 1975.

(TABLE 8 CONTINUED ON NEXT PAGE)

(TABLE 8 CONTINUED)

WISCONSIN

UNIT AND COUNTY 1/	BALSAM FIR	CEDAR	HEMLOCK	JACK PINE	RED PINE	WHITE PINE	SPRUCE	TAMARACK	ASH	ASPEN	BALSAM POPLAR	BASSWOOD
NORTHEASTERN												
FLORENCE	3033	5	974	1035	675	100	1715	29	101	28958	0	24
FOREST	12926	93	7483	1838	3076	362	2597	167	910	37790	10	274
LANGLADE	3198	0	1063	500	1046	89	660	298	1078	24569	0	404
LINCOLN	3659	0	1336	705	1074	154	802	498	3270	32492	0	1717
MARINETTE	10328	165	2990	2748	3662	727	2188	157	771	58860	40	21
OCONTO	1541	22	593	1509	1496	142	706	4	10	18383	0	0
ONEIDA	18177	1	1739	5193	6436	668	6148	467	1383	39700	0	589
SHAWANO 2/	130	0	9190	191	1010	75	20	0	608	7056	0	5
VILAS	10997	0	4991	7991	2922	838	3392	84	174	38414	0	90
TOTAL	63989	286	30359	21710	21397	3155	18228	1704	8305	286222	50	3124
NORTHWESTERN												
ASHLAND	9875	0	2053	5657	2009	412	2292	158	1354	20801	0	192
BARRON	0	0	0	154	30	12	46	0	41	0	0	4
BAYFIELD	3850	0	1252	5456	2976	346	615	0	728	45829	0	57
BURNETT	0	0	0	12053	2889	744	12	95	0	4320	0	0
DOUGLAS	340	0	145	11450	1606	231	52	0	74	18553	0	2
IRON	3177	0	2690	138	218	32	569	0	838	52632	0	652
POLK	0	0	0	1647	320	103	0	0	0	0	0	0
PRICE	7412	0	1958	1160	2001	255	1195	557	3689	44654	0	2418
RUSK	131	0	107	72	61	15	0	46	956	7942	0	679
SAWYER	5031	0	693	1313	1490	206	1353	127	2142	19640	0	514
TAYLOR	2847	0	3671	338	623	216	197	466	3178	22427	0	953
WASHBURN	705	0	0	5785	1740	287	227	0	171	39383	0	8
TOTAL	33368	0	12569	45223	15963	2859	6558	1449	13171	276181	0	5479
CENTRAL												
ADAMS	0	0	0	19728	8792	1471	0	0	227	64	0	14
CHIPPEWA	144	0	98	246	400	20	22	150	773	6542	0	451
CLARK	118	0	14	1837	1945	206	111	0	1033	1981	0	62
EAU CLAIRE	0	0	0	3942	2262	374	0	0	0	127	0	0
JACKSON	0	0	0	9167	4385	750	0	0	110	276	0	5
JUNEAU	0	0	0	10341	3671	755	54	24	329	408	0	1
MARATHON	606	0	2092	767	653	98	64	6	1623	8023	0	57
MARQUETTE	0	0	0	912	1619	151	0	105	227	15	0	9
MONROE	0	0	0	3379	1662	283	0	0	18	59	0	1
PORTAGE	41	0	212	2750	3180	499	47	88	605	2884	0	41
WAUPACA	4	0	4	365	1238	97	18	15	139	2351	0	7
WAUSHARA	0	0	5	2130	3744	341	0	0	59	50	0	3
WOOD	0	0	98	19834	6826	1378	2	8	1427	2176	0	81
TOTAL	913	0	2523	75398	40377	6423	318	396	6570	24956	0	732
SOUTHWESTERN												
BUFFALO	0	0	0	0	0	0	0	0	0	10	0	0
CRAWFORD	0	0	0	0	0	0	0	0	162	15	0	8
DUNN	0	0	0	285	547	52	0	0	0	0	0	0
GRANT	0	0	0	0	0	0	0	0	15	1	0	1
IOWA	0	0	0	0	0	0	0	0	0	26	0	0
LACROSSE	0	0	0	130	225	19	0	0	0	0	0	0
PEPIN	0	0	0	336	438	41	0	0	0	0	0	0
RICHLAND	0	0	0	30	42	4	0	0	0	0	0	0
SAUK	0	0	0	73	144	11	0	0	0	0	0	0
TREMPEALEAU	0	0	0	20	27	2	0	0	0	0	0	0
TOTAL	0	0	0	874	1423	129	0	0	177	52	0	9
SOUTHEASTERN												
BROWN	0	0	19	64	162	10	0	0	0	113	0	0
COLUMBIA	0	0	0	249	1548	82	0	0	66	0	0	2
DANE	0	0	0	197	57	14	0	0	0	0	0	0
GREEN	0	0	0	594	199	42	0	0	0	0	0	0
GREEN LAKE	0	0	0	309	215	27	0	0	38	0	0	0
KEWAUNEE	0	0	0	0	0	0	0	0	0	25	0	0
MANITOWOC	0	0	0	0	0	0	0	0	0	14	0	0
MILWAUKEE	0	0	0	0	0	0	0	0	0	0	0	0
OUTAGAMIE	0	0	0	9	76	4	0	0	0	3	0	0
ROCK	0	0	0	182	115	38	0	0	0	0	0	0
WAUKESHA	0	0	0	757	44	75	0	0	0	0	0	0
TOTAL	0	0	19	2361	2416	292	0	0	104	155	0	2
STATE TOTAL	98270	286	45470	145566	81576	12858	25104	3549	28327	587566	50	9346

1/ INCLUDES ONLY THOSE COUNTIES THAT SUPPLIED PULPWOOD IN 1975.
2/ INCLUDES MENOMINEE COUNTY.

(TABLE 8 CONTINUED ON NEXT PAGE)

(TABLE 8 CONTINUED)

WISCONSIN

UNIT AND COUNTY 1/	BEECH	WHITE BIRCH	YELLOW BIRCH	COTTON-WOOD	ELM	HICKORY	HARD MAPLE	SOFT MAPLE	RED OAK	WHITE OAK	OTHER HARD-WOODS	ALL SPECIES
NORTHEASTERN												
FLORENCE	0	300	313	0	815	0	1706	199	103	0	58	40143
FOREST	32	1234	984	0	3160	0	7082	1042	237	0	403	81700
LANGLADE	175	1158	618	0	3584	0	5653	1748	380	0	412	46633
LINCOLN	0	4220	838	0	4377	24	5694	3888	1788	0	221	66757
MARINETTE	58	4880	342	0	636	0	998	1447	512	48	24	91602
OCONTO	7	16	3	0	64	0	70	30	24	0	0	24620
ONEIDA	0	7658	696	0	875	0	2561	3605	4005	0	167	100068
SHAWANO 2/	1370	196	47	0	6425	442	668	398	108	3	453	28395
VILAS	0	8117	1232	0	671	0	5140	1391	1741	66	102	88353
TOTAL	1642	27779	5073	0	20607	466	29572	13748	8898	117	1840	568271
NORTHWESTERN												
ASHLAND	0	3275	575	0	1023	0	2541	1657	592	64	54	54584
BARRON	0	28	9	0	44	0	72	43	56	11	2	552
BAYFIELD	0	7147	270	0	615	0	1427	880	1032	77	32	72589
BURNETT	0	49	0	0	0	0	0	0	0	0	0	20162
DOUGLAS	0	3178	21	0	63	0	98	75	23	6	4	35921
IRON	0	3032	309	0	752	0	1487	849	614	14	41	68044
POLK	0	0	0	0	0	0	0	0	0	0	0	2070
PRICE	0	7910	1507	0	2809	0	5664	3630	2192	61	149	89221
RUSK	0	1431	425	0	1554	0	1667	1217	782	16	47	17148
SAWYER	0	6168	715	0	1730	0	3612	2354	1882	182	103	49255
TAYLOR	0	4835	1481	0	5327	45	6345	3829	1536	48	139	58501
WASHBURN	0	1224	38	0	152	0	217	166	212	39	9	50363
TOTAL	0	38277	5350	0	14069	45	23130	14700	8921	518	580	518410
CENTRAL												
ADAMS	0	160	35	0	445	0	113	287	2470	620	28	34454
CHIPPEWA	7	1174	646	0	1863	0	1398	1667	362	40	7	16010
CLARK	1	693	285	0	2130	0	1095	1682	3577	886	111	17767
EAU CLAIRE	0	0	0	0	0	0	0	0	0	0	0	6705
JACKSON	0	149	29	0	210	0	110	211	838	193	20	16453
JUNEAU	0	185	48	0	596	0	105	280	2051	565	28	19441
MARATHON	0	943	706	0	5714	40	3019	3694	4589	543	104	33341
MARQUETTE	0	175	29	0	403	0	83	275	1163	346	28	5540
MONROE	0	31	4	0	35	0	20	39	627	123	0	6281
PORTAGE	0	252	121	0	1309	0	418	743	2299	695	48	16232
WAUPACA	0	112	22	0	234	0	65	150	370	115	10	5316
WAUSHARA	0	28	9	0	111	0	27	63	377	108	6	7061
WOOD	0	678	212	0	2483	0	677	1589	5252	1515	98	44334
TOTAL	8	4580	2146	0	15533	40	7130	10680	23975	5749	488	228935
SOUTHWESTERN												
BUFFALO	0	0	0	0	0	0	0	0	0	0	0	10
CRAWFORD	0	7	0	295	111	243	472	295	343	130	7	2088
DUNN	0	0	0	0	0	0	0	0	0	0	0	884
GRANT	0	1	0	28	10	23	44	28	32	12	1	196
IOWA	0	0	0	0	0	0	0	0	0	0	0	26
LACROSSE	0	0	0	0	0	0	0	0	0	0	0	374
PEPIN	0	0	0	0	0	0	0	0	0	0	0	815
RICHLAND	0	0	0	0	0	0	0	0	0	0	0	76
SAUK	0	0	0	0	0	0	0	0	0	0	0	228
TREMPEALEAU	0	0	0	0	0	0	0	0	0	0	0	49
TOTAL	0	8	0	323	121	266	516	323	375	142	8	4746
SOUTHEASTERN												
BROWN	0	0	0	0	0	0	0	0	0	0	0	368
COLUMBIA	0	8	1	0	43	0	37	29	171	114	24	2374
DANE	0	0	0	0	136	0	0	0	0	0	0	404
GREEN	0	0	0	0	0	0	0	0	0	0	0	835
GREEN LAKE	10	9	2	0	71	0	36	23	0	0	22	762
KEWAUNEE	0	0	0	0	0	0	0	0	0	0	0	25
MANITOWOC	0	0	0	0	0	0	0	0	0	0	0	14
MILWAUKEE	0	0	0	0	376	0	0	0	0	0	0	376
OUTAGAMIE	0	0	0	0	0	0	0	0	0	0	0	92
ROCK	0	0	0	0	0	0	0	0	0	0	0	335
WAUKESHA	0	0	0	0	0	0	0	0	0	0	0	876
TOTAL	10	17	3	0	626	0	73	52	171	114	46	6461
STATE TOTAL	1660	70661	12572	323	50956	817	60421	39503	42340	6640	2962	1326823

1/ INCLUDES ONLY THOSE COUNTIES THAT SUPPLIED PULPWOOD IN 1975.
2/ INCLUDES MENOMINEE COUNTY.

Table 9.—*Lake States saw log production by State, species, and selected year*
(In thousand board feet)[1]

Species	Michigan			Minnesota			Wisconsin			Lake States
	1965	1975	Change	1960	1975	Change	1967	1975	Change	1975
SOFTWOODS:										
Cedar	1,032	2,502	1,470	2,050	4,589	2,539	769	1,711	942	8,802
Balsam fir	2,193	776	–1,417	4,170	2,100	–2,070	136	1,948	1,812	4,824
Hemlock	18,022	12,980	–5,042	0	0	0	3,279	6,079	2,800	19,059
Jack pine	1,599	7,926	6,327	23,468	29,058	5,590	476	5,050	4,574	42,034
Red pine	4,425	6,835	2,410	16,090	10,680	–5,410	3,604	11,728	8,124	29,243
White pine	10,410	16,989	6,579	25,678	11,272	–14,406	20,135	34,608	14,473	62,869
Spruce	1,172	1,897	725	3,383	3,145	–238	248	2,106	1,858	7,148
Tamarack	12	0	–12	1,287	79	–1,208	33	18	–15	97
Total	38,865	49,905	11,040	76,126	60,923	–15,203	28,680	63,248	34,568	174,076
HARDWOODS:										
Ash	9,025	7,503	–1,522	4,223	3,954	–269	6,571	5,866	–705	17,323
Aspen	35,748	63,180	27,432	37,587	49,501	11,914	30,726	50,061	19,335	162,742
Balsam poplar	4,976	851	–4,125	621	1,269	648	28	208	180	2,328
Basswood	15,879	12,494	–3,385	9,165	4,369	–4,796	22,061	19,181	–2,880	36,044
Beech	18,073	15,915	–2,158	0	0	0	1,222	794	–428	16,709
Paper birch	5,207	8,104	2,897	3,722	2,728	–994	2,899	6,341	3,442	17,173
Yellow birch	19,591	10,243	–9,348	874	0	–874	5,302	3,758	–1,544	14,001
Cottonwood	5,417	6,144	727	4,993	3,196	–1,797	1,595	1,117	–478	10,457
Elm	60,845	15,181	–45,664	8,876	9,508	632	30,866	45,883	15,017	70,572
Hard maple	80,611	87,156	6,545	585	934	349	42,010	35,982	–6,028	124,072
Soft maple	27,524	24,588	–2,936	1,582	781	–801	12,195	11,498	–697	36,867
Red oak	41,780	46,045	4,265	15,033	14,355	–678	73,115	69,779	–3,336	130,179
White oak	12,674	8,196	–4,478	4,147	4,187	40	11,358	17,547	6,189	29,930
Walnut	357	809	452	234	236	2	794	882	88	1,927
Other hardwoods	10,893	2,922	–7,971	342	182	–160	3,088	2,541	–547	5,645
Total	348,600	309,331	–39,269	91,984	95,200	3,216	243,830	271,438	27,608	675,969
All species	387,465	359,236	–28,229	168,110	156,123	–11,987	272,510	334,686	62,176	850,045

[1]International ¼-inch rule.

Table 10.—*Lake States saw log production by State, species and State of destination, 1975*
(In thousand board feet)[1]

MICHIGAN

Species	Destination of wood					Total
	Michigan	Wisconsin	Indiana	Kentucky	Other States	
SOFTWOODS:						
Cedar	2,496	6	0	0	0	2,502
Balsam fir	561	215	0	0	0	776
Hemlock	12,955	25	0	0	0	12,980
Jack pine	7,478	448	0	0	0	7,926
Red pine	6,222	613	0	0	0	6,835
White pine	16,193	796	0	0	0	16,989
Spruce	1,749	148	0	0	0	1,897
Tamarack	0	0	0	0	0	0
Total	47,654	2,251	0	0	0	49,905
HARDWOODS:						
Ash	7,226	37	240	0	0	7,503
Aspen	48,510	14,665	5	0	0	63,180
Balsam poplar	851	0	0	0	0	851
Basswood	11,033	1,327	134	0	0	12,494
Beech	15,789	2	124	0	0	15,915
Paper birch	4,995	3,109	0	0	0	8,104
Yellow birch	9,899	344	0	0	0	10,243
Cottonwood	6,111	0	33	0	0	6,144
Elm	14,486	680	15	0	0	15,181
Hickory	1,970	0	15	0	0	1,985
Hard maple	84,668	1,938	550	0	0	87,156
Soft maple	23,989	152	447	0	0	24,588
Red oak	44,951	483	610	1	0	46,045
White oak	7,814	0	381	1	0	8,196
Walnut	686	0	78	45	0	809
Other species	795	0	128	14	0	937
Total	283,773	22,737	2,760	61	0	309,331
All species	331,427	24,988	2,760	61	0	359,236

(Table 10 continued on next page)

(Table 10 continued)

MINNESOTA

Species	Destination of wood					Total
	Minnesota	Wisconsin	Missouri	Kentucky	Other States	
SOFTWOODS:						
Cedar	4,589	0	0	0	0	4,589
Balsam fir	1,927	173	0	0	0	2,100
Hemlock	0	0	0	0	0	0
Jack pine	28,475	583	0	0	0	29,058
Red pine	10,212	468	0	0	0	10,680
White pine	10,992	280	0	0	0	11,272
Spruce	3,046	99	0	0	0	3,145
Tamarack	79	0	0	0	0	79
Total	59,320	1,603	0	0	0	60,923
HARDWOODS:						
Ash	3,923	31	0	0	0	3,954
Aspen	49,399	102	0	0	0	49,501
Balsam poplar	1,269	0	0	0	0	1,269
Basswood	4,285	84	0	0	0	4,369
Beech	0	0	0	0	0	0
Paper birch	2,717	11	0	0	0	2,728
Yellow birch	0	0	0	0	0	0
Cottonwood	3,186	10	0	0	0	3,196
Elm	9,426	82	0	0	0	9,508
Hickory	67	11	0	0	0	78
Hard maple	896	38	0	0	0	934
Soft maple	668	113	0	0	0	781
Red oak	13,064	1,291	0	0	0	14,355
White oak	3,953	234	0	0	0	4,187
Walnut	131	0	70	28	7	236
Other hardwoods	104	0	0	0	0	104
Total	93,088	2,007	70	28	7	95,200
All species	152,408	3,610	70	28	7	156,123

(Table 10 continued on next page)

(Table 10 continued)

WISCONSIN

Species	Destination of wood					
	Wisconsin	Michigan	Illinois	Iowa	Other States	Total
SOFTWOODS:						
Cedar	1,667	44	0	0	0	1,711
Balsam fir	1,871	77	0	0	0	1,948
Hemlock	6,078	1	0	0	0	6,079
Jack pine	4,879	171	0	0	0	5,050
Red pine	11,421	307	0	0	0	11,728
White pine	33,993	615	0	0	0	34,608
Spruce	2,062	44	0	0	0	2,106
Tamarack	18	0	0	0	0	18
Total	61,989	1,259	0	0	0	63,248
HARDWOODS:						
Ash	5,811	37	18	0	0	5,866
Aspen	49,838	86	127	10	0	50,061
Balsam poplar	208	0	0	0	0	208
Basswood	18,944	222	15	0	0	19,181
Beech	791	3	0	0	0	794
Paper birch	6,272	69	0	0	0	6,341
Yellow birch	3,592	166	0	0	0	3,758
Cottonwood	1,109	0	6	2	0	1,117
Elm	45,362	491	0	30	0	45,883
Hickory	1,608	0	31	0	0	1,639
Hard maple	34,816	1,138	28	0	0	35,982
Soft maple	11,415	65	18	0	0	11,498
Red oak	69,289	69	321	100	0	69,779
White oak	17,325	2	140	80	0	17,547
Walnut	237	0	12	344	289	882
Other hardwoods	877	0	10	3	12	902
Total	267,494	2,348	726	569	301	271,438
All species	329,483	3,607	726	569	301	334,686

[1]International ¼-inch rule.

Table 11.—*Lake States saw log production by county and species, 1975*

(In thousand board feet)[1]

MICHIGAN

UNIT AND COUNTY	CEDAR	BALSAM FIR	HEMLOCK	JACK PINE	RED PINE	WHITE PINE	SPRUCE	TAMA-RACK	ASH	ASPEN	BALSAM POPLAR	BASS-WOOD	BEECH	WHITE BIRCH
E. UPPER PENINSULA														
ALGER	50	11	204	35	99	895	75	0	4	100	0	220	4785	35
CHIPPEWA	113	60	145	90	157	498	70	0	43	780	0	206	282	132
DELTA	173	13	73	51	232	323	26	0	0	318	0	278	51	110
LUCE	81	40	340	950	546	1786	103	0	173	881	0	359	3793	298
MACKINAC	322	54	200	18	184	889	180	0	133	2485	343	276	541	523
MENOMINEE	581	12	534	12	185	828	11	0	7	827	24	405	57	934
SCHOOLCRAF	0	13	232	56	599	832	7	0	28	193	0	118	268	148
UNIT TOTAL	1320	203	1728	1212	2002	6051	472	0	388	5584	367	1862	9777	2180
W. UPPER PENINSULA														
BARAGA	33	47	3195	106	247	1317	430	0	52	2452	0	307	0	108
DICKINSON	449	125	2	36	248	666	118	0	6	639	9	310	2	275
GOGEBIC	425	17	3915	100	88	838	232	0	602	5049	0	1038	0	1238
HOUGHTON	34	15	708	24	179	1413	90	0	39	3664	0	468	0	663
IRON	38	241	687	54	174	987	158	0	125	2062	0	1005	0	533
KEWEENAW	0	5	8	3	4	317	63	0	0	44	0	149	0	1
MARQUETTE	184	107	1779	314	363	1702	220	0	41	380	0	198	736	128
ONTONAGON	3	16	255	63	70	449	114	0	200	6450	0	307	0	1106
UNIT TOTAL	1166	573	10549	700	1373	7689	1425	0	1065	20740	9	3782	738	4052
N. LOWER PENINSULA														
ALCONA	10	0	0	75	80	80	0	0	263	2725	250	108	15	63
ALPENA	0	0	0	250	250	100	0	0	22	1474	0	47	0	22
ANTRIM	0	0	60	5	105	115	0	0	40	1290	0	490	205	65
ARENAC	0	0	0	0	250	275	0	0	50	1025	0	75	20	150
BAY	0	0	0	0	0	0	0	0	7	0	0	7	6	0
BENZIE	0	0	0	0	0	10	0	0	115	145	0	135	50	3
CHARLEVOIX	0	0	30	5	0	10	0	0	64	450	0	335	186	25
CHEBOYGAN	0	0	23	0	10	27	0	0	3	2498	0	131	86	203
CLARE	0	0	0	0	0	0	0	0	25	1465	0	0	10	60
CRAWFORD	0	0	0	511	520	143	0	0	0	853	0	0	0	35
EMMET	0	0	0	0	25	25	0	0	101	468	0	207	139	30
GLADWIN	0	0	0	25	25	50	0	0	0	1900	0	150	10	110
GRAND TRAV	0	0	0	0	0	0	0	0	0	0	0	25	0	0
IOSCO	0	0	0	0	30	30	0	0	0	1000	0	50	0	0
ISABELLA	0	0	0	0	180	95	0	0	25	600	0	45	50	200
KALKASKA	0	0	10	25	100	180	0	0	0	743	0	30	8	0
LAKE	0	0	10	250	270	20	0	0	0	385	25	58	0	0
LEELANAU	0	0	45	0	0	0	0	0	209	477	0	274	506	0
MANISTEE	0	0	35	0	45	80	0	0	25	195	0	85	25	2
MASON	0	0	10	0	20	40	0	0	60	92	0	107	50	5
MECOSTA	0	0	0	0	0	0	0	0	36	216	0	0	58	0
MIDLAND	0	0	0	0	0	0	0	0	25	325	0	0	0	0
MISSAUKEE	0	0	0	0	58	115	0	0	6	881	0	68	156	20
MONTMORENC	0	0	0	215	150	171	0	0	20	1897	0	327	89	139
NEWAYGO	0	0	7	0	0	245	0	0	94	785	0	100	201	3
OCEANA	0	0	27	0	0	30	0	0	82	150	0	227	152	4
OGEMAW	0	0	0	325	485	235	0	0	75	2415	0	75	10	285
OSCEOLA	0	0	208	0	0	125	0	0	56	1897	0	57	214	14
OSCODA	0	0	0	3560	310	310	0	0	20	2243	0	150	25	35
OTSEGO	0	0	42	0	21	10	0	0	2	838	0	188	30	47
PRESQUE IS	6	0	95	0	0	92	0	0	3	1144	0	124	48	3
ROSCOMMON	0	0	50	768	526	224	0	0	87	3615	0	102	16	235
WEXFORD	0	0	0	0	0	0	0	0	62	287	0	118	52	13
UNIT TOTAL	16	0	652	6014	3460	2837	0	0	1577	34478	275	3895	2417	1771
S. LOWER PENINSULA														
ALLEGAN	0	0	0	0	0	48	0	0	220	35	0	124	27	0
BARRY	0	0	0	0	0	0	0	0	262	88	0	259	239	0
BERRIEN	0	0	0	0	0	0	0	0	61	0	0	45	66	0
BRANCH	0	0	0	0	0	0	0	0	158	1	100	56	104	0
CALHOUN	0	0	0	0	0	0	0	0	339	21	100	109	199	0
CASS	0	0	0	0	0	0	0	0	105	1	0	34	71	0
CLINTON	0	0	0	0	0	0	0	0	388	53	0	245	238	0
EATON	0	0	0	0	0	0	0	0	56	0	0	52	51	0
GENESSEE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRATIOT	0	0	0	0	0	0	0	0	106	80	0	76	142	0
HILLSDALE	0	0	0	0	0	0	0	0	10	0	0	0	0	0
HURON	0	0	0	0	0	0	0	0	270	500	0	140	20	100
INGHAM	0	0	0	0	0	0	0	0	201	50	0	200	100	0
IONIA	0	0	0	0	0	0	0	0	258	42	0	259	388	0
JACKSON	0	0	0	0	0	0	0	0	50	0	0	40	20	0
KALAMAZOO	0	0	0	0	0	0	0	0	70	6	0	64	53	0
KENT	0	0	0	0	0	60	0	0	361	28	0	181	247	0
LAPEER	0	0	1	0	0	2	0	0	150	29	0	69	109	1
LENAWEE	0	0	0	0	0	0	0	0	144	0	0	124	62	0
LIVINGSTON	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MACOMB	0	0	0	0	0	0	0	0	48	15	0	50	0	0
MONROE	0	0	0	0	0	0	0	0	97	0	0	124	62	0
MONTCALM	0	0	0	0	0	20	0	0	114	0	0	87	45	0
MUSKEGON	0	0	0	0	0	7	0	0	0	0	0	7	7	0
OAKLAND	0	0	0	0	0	0	0	0	163	28	0	129	104	0
OTTAWA	0	0	0	0	0	0	0	0	37	0	0	30	135	0
SAGINAW	0	0	0	0	0	0	0	0	221	153	0	150	162	0
ST.CLAIR	0	0	50	0	0	250	0	0	152	35	0	100	0	0
ST.JOSEPH	0	0	0	0	0	0	0	0	53	3	0	20	21	0
SANILAC	0	0	0	0	0	0	0	0	20	100	0	0	0	0
SHIAWASSEE	0	0	0	0	0	0	0	0	101	0	0	40	62	0
TUSCOLA	0	0	0	0	0	0	0	0	138	1110	0	60	152	0
VAN BUREN	0	0	0	0	0	25	0	0	85	0	0	56	97	0
WASHTENAW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WAYNE	0	0	0	0	0	0	0	0	35	0	0	25	0	0
UNIT TOTAL	0	0	51	0	0	412	0	0	4473	2378	200	2955	2983	101
STATE TOTAL	2502	776	12980	7926	6835	16989	1897	0	7503	63180	851	12494	15915	8104

(TABLE 11 CONTINUED ON NEXT PAGE)

(TABLE 11 CONTINUED)

UNIT AND COUNTY	YELLOW BIRCH	COTTON-WOOD	ELM	HICKORY	HARD MAPLE	SOFT MAPLE	RED OAK	WHITE OAK	WALNUT	OTHER HARD-WOODS	ALL SPECIES
E. UPPER PENINSULA											
ALGER	542	0	384	0	9043	1098	0	0	0	92	17672
CHIPPEWA	232	0	379	0	1723	216	26	17	0	2	5171
DELTA	120	0	294	0	343	121	0	0	0	0	2526
LUCE	773	0	507	0	7282	1329	0	56	0	82	19379
MACKINAC	441	0	1167	0	2810	669	4	28	0	22	11289
MENOMINEE	129	0	1722	0	2025	555	116	0	0	2	8966
SCHOOLCRAF	261	0	418	0	1145	187	0	11	0	0	4516
UNIT TOTAL	2498	0	4871	0	24371	4175	146	112	0	200	69519
W. UPPER PENINSULA											
BARAGA	1619	0	985	0	10057	1076	150	0	0	8	22189
DICKINSON	118	0	1164	0	590	97	50	0	0	0	4904
GOGEBIC	2398	0	1195	0	11731	1245	380	0	0	7	30498
HOUGHTON	788	0	334	0	8114	724	408	0	0	1	17666
IRON	895	0	1243	0	5443	267	68	2	0	46	14028
KEWEENAW	369	0	4	0	1900	342	366	0	0	0	3575
MARQUETTE	510	0	475	0	6043	553	1048	0	0	38	14819
ONTONAGON	690	0	503	0	3126	398	195	0	0	4	13949
UNIT TOTAL	7387	0	5903	0	47004	4702	2665	2	0	104	121628
N. LOWER PENINSULA											
ALCONA	0	10	23	0	58	367	756	50	0	0	4933
ALPENA	0	0	22	0	22	389	109	0	0	0	2707
ANTRIM	10	0	475	25	600	180	180	0	2	0	3847
ARENAC	25	500	0	0	50	500	315	10	0	0	3245
BAY	0	259	0	0	9	3	135	80	0	0	506
BENZIE	0	0	0	125	295	65	0	10	0	0	953
CHARLEVOIX	1	40	143	25	586	130	30	0	0	0	2060
CHEBOYGAN	6	0	632	0	188	568	188	0	0	0	4563
CLARE	0	0	25	0	0	155	350	25	0	0	2115
CRAWFORD	0	0	0	0	13	36	1132	5	0	0	3248
EMMET	1	120	316	0	364	26	143	0	0	0	1965
GLADWIN	25	475	0	0	92	1137	1245	0	0	0	5244
GRAND TRAV	0	0	0	0	100	0	0	0	0	0	125
IOSCO	0	0	0	0	50	125	320	10	0	0	1615
ISABELLA	0	0	0	0	320	160	420	50	0	0	2145
KALKASKA	0	0	145	0	25	0	769	0	0	0	2035
LAKE	0	0	45	0	160	150	1139	249	0	0	2761
LEELANAU	50	0	126	0	1039	50	0	0	0	0	2776
MANISTEE	0	0	10	100	395	135	500	10	0	0	1642
MASON	0	0	23	225	313	259	937	325	0	7	2473
MECOSTA	0	0	0	0	58	58	72	0	0	0	498
MIDLAND	50	550	25	0	25	185	365	25	0	0	1575
MISSAUKEE	0	0	150	0	174	200	1203	14	0	0	3045
MONTMORENC	25	50	290	50	172	835	620	0	0	0	5050
NEWAYGO	5	7	0	0	789	413	3923	98	0	10	6680
OCEANA	26	3	75	128	1028	605	2283	285	0	207	5312
OGEMAW	25	230	25	0	116	433	2012	20	0	0	6766
OSCEOLA	7	0	14	0	928	403	931	132	0	0	4986
OSCODA	0	0	40	0	70	290	1813	13	0	0	8879
OTSEGO	0	0	266	0	80	202	103	50	0	0	1879
PRESQUE IS	6	0	357	0	66	364	46	0	0	0	2354
ROSCOMMON	25	150	25	0	165	335	5051	10	0	0	11384
WEXFORD	13	0	0	0	393	31	137	50	0	0	1156
UNIT TOTAL	300	2394	3252	678	8743	8789	27227	1521	2	224	110522
S. LOWER PENINSULA											
ALLEGAN	3	0	0	0	335	41	400	7	0	20	1260
BARRY	0	104	1	96	493	462	1818	545	29	29	4425
BERRIEN	0	19	3	8	167	115	571	99	16	19	1189
BRANCH	0	2	0	1	224	111	224	13	11	11	1016
CALHOUN	0	44	0	118	357	448	1044	304	15	44	3142
CASS	0	13	3	4	173	116	651	107	15	28	1321
CLINTON	0	173	0	119	576	570	1118	624	50	28	4182
EATON	0	0	0	0	124	52	104	0	1	0	440
GENESSEE	0	0	0	0	0	0	0	0	8	0	8
GRATIOT	0	176	264	50	68	312	594	307	0	0	2175
HILLSDALE	0	0	0	10	10	20	40	10	0	0	100
HURON	0	710	0	20	600	120	200	200	20	0	2900
INGHAM	0	54	0	50	200	205	330	210	50	0	1650
IONIA	0	50	0	94	471	401	674	247	104	0	2988
JACKSON	0	60	0	20	100	100	200	200	20	0	810
KALAMAZOO	0	3	1	13	174	85	176	21	11	20	697
KENT	0	107	0	102	779	523	1705	598	0	68	4759
LAPEER	0	100	0	35	281	356	911	536	1	28	2609
LENAWEE	0	85	31	117	136	195	348	224	62	0	1528
LIVINGSTON	0	10	0	0	10	20	30	0	30	0	100
MACOMB	0	55	0	25	10	65	120	15	45	0	448
MONROE	0	55	16	117	124	144	236	174	31	0	1180
MONTCALM	2	19	1	0	222	142	365	67	0	0	1084
MUSKEGON	0	0	0	0	14	68	168	178	0	7	456
OAKLAND	0	69	124	122	463	345	893	452	67	28	2987
OTTAWA	3	1	0	3	62	142	281	55	0	6	755
SAGINAW	50	427	264	70	155	753	778	570	23	0	3776
ST.CLAIR	0	135	0	0	80	160	210	40	45	0	1257
ST.JOSEPH	0	10	3	12	57	107	237	105	11	38	677
SANILAC	0	165	0	1	10	110	40	5	30	2	483
SHIAWASSEE	0	83	0	20	100	140	205	244	20	0	1015
TUSCOLA	0	969	264	20	119	264	394	241	20	0	3751
VAN BUREN	0	22	6	10	194	210	592	113	22	33	1465
WASHTENAW	0	0	0	0	0	0	0	0	0	0	0
WAYNE	0	30	174	50	150	20	350	50	50	0	934
UNIT TOTAL	58	3750	1155	1307	7038	6922	16007	6561	807	409	57567
STATE TOTAL	10243	6144	15181	1985	87156	24588	46045	8196	809	937	359236

(TABLE 11 CONTINUED ON NEXT PAGE)

UNIT AND COUNTY	CEDAR	BALSAM FIR	HEMLOCK	JACK PINE	RED PINE	WHITE PINE	SPRUCE	TAMA-RACK	ASH	ASPEN	BALSAM POPLAR	BASS-WOOD	BEECH	WHITE BIRCH
NORTHERN ASPEN-BIRCH														
CARLTON	1	60	0	411	141	51	6	0	10	298	0	0	0	23
COOK	209	188	0	240	4	2333	477	0	38	2482	0	0	0	380
KOOCHICH.	3484	599	0	1254	274	274	547	1	312	4693	583	131	0	131
LAKE	257	73	0	3536	325	2191	150	0	76	798	0	0	0	426
ST.LOUIS	158	203	0	7232	1321	1663	527	2	48	4833	0	2	0	28
UNIT TOTAL	4109	1123	0	12673	2065	6512	1707	3	484	13104	583	133	0	988
NORTHERN PINE														
AITKIN	5	36	0	314	189	277	5	0	1248	6065	0	295	0	289
BECKER	0	7	0	1519	234	383	32	8	97	524	0	265	0	56
BELTRAMI	165	16	0	1963	1133	1081	3	0	108	2149	91	339	0	120
CASS	55	178	0	2511	2861	772	21	0	33	4126	0	65	0	100
CLEARWATER	0	1	0	858	272	58	28	0	0	1826	0	25	0	100
CROW WING	0	5	0	1097	595	59	0	0	508	2600	0	356	0	242
HUBBARD	0	1	0	1717	140	208	1	0	0	344	0	0	0	0
ITASCA	37	670	0	988	1919	1586	1064	0	382	14453	105	346	0	660
LAKE-WOODS	210	13	0	1086	95	94	177	31	0	444	0	0	0	0
MAHNOMEN	0	0	0	312	100	55	0	0	0	640	0	10	0	25
ROSEAU	0	3	0	2150	0	0	93	31	0	36	0	0	0	0
WADENA	0	25	0	1156	795	60	0	0	48	228	0	127	0	23
UNIT TOTAL	472	955	0	15671	8333	4633	1424	70	2424	33435	196	1828	0	1615
CENTRAL HARDWOODS														
ANOKA	5	0	0	0	0	0	0	0	7	30	0	3	0	2
BENTON	1	0	0	0	6	1	0	0	0	50	0	6	0	1
CARVER	0	0	0	0	0	0	0	0	50	0	0	40	0	0
CHISAGO	0	0	0	0	0	0	0	0	7	30	0	3	0	1
DAKOTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DOUGLAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FILLMORE	2	0	0	0	0	2	0	0	120	20	240	349	0	1
GOODHUE	0	0	0	0	0	0	0	0	68	0	0	192	0	0
HENNEPIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOUSTON	0	0	0	0	0	1	0	0	5	93	240	86	0	8
ISANTI	0	0	0	0	0	0	0	0	2	6	0	1	0	0
KANABEC	0	0	0	0	0	0	0	0	22	711	0	0	0	11
LE SUEUR	0	0	0	0	0	0	0	0	48	0	0	139	0	0
MILLE LACS	0	0	0	0	0	22	0	0	106	1049	0	274	0	28
MORRISON	0	0	0	231	48	52	0	0	17	112	0	122	0	0
OLMSTED	0	0	0	0	0	0	0	0	19	0	0	64	0	0
OTTER TAIL	0	0	0	124	5	6	8	6	83	333	0	255	0	31
PINE	0	22	0	184	123	43	3	0	0	80	0	0	0	7
RAMSEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RICE	0	0	0	0	0	0	0	0	22	0	0	71	0	0
SCOTT	0	0	0	0	0	0	0	0	50	0	0	30	0	0
SHERBURNE	0	0	0	0	0	0	0	0	17	0	0	0	0	0
STEARNS	0	0	0	0	0	3	0	0	95	142	10	199	0	6
TODD	0	0	0	175	100	0	0	0	58	113	0	95	0	17
WABASHA	0	0	0	0	0	0	0	0	9	79	0	37	0	6
WASHINGTON	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WINONA	0	0	0	0	0	0	0	0	22	16	0	106	0	6
WRIGHT	0	0	0	0	0	0	0	0	4	82	0	48	0	0
UNIT TOTAL	8	22	0	714	282	127	14	6	831	2946	490	2120	0	125
PRAIRIE														
BIG STONE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BLUE EARTH	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHIPPEWA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CLAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COTTONWOOD	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DODGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FARIBAULT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FREEBORN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRANT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JACKSON	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KANDIYOHI	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KITTSON	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LAC QUI PA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LINCOLN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LYON	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MCLEOD	0	0	0	0	0	0	0	0	60	8	0	84	0	0
MARSHALL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MARTIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MEEKER	0	0	0	0	0	0	0	0	63	8	0	45	0	0
MOWER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MURRAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NICOLLET	0	0	0	0	0	0	0	0	36	0	0	104	0	0
NOBLES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NORMAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PENNINGTON	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PIPESTONE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
POLK	0	0	0	0	0	0	0	0	39	0	0	0	0	0
POPE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED LAKE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDWOOD	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RENVILLE	0	0	0	0	0	0	0	0	0	0	0	5	0	0
ROCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SIBLEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STEELE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STEVENS	0	0	0	0	0	0	0	0	5	0	0	15	0	0
SWIFT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRAVERSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASECA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WATONWAN	0	0	0	0	0	0	0	0	12	0	0	35	0	0
WILKIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y.MEDICINE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNIT TOTAL	0	0	0	0	0	0	0	0	215	16	0	288	0	0
STATE TOTAL	4589	2100	0	29058	10680	11272	3145	79	3954	49501	1269	4369	0	2728

(TABLE 11 CONTINUED ON NEXT PAGE)

(TABLE 11 CONTINUED)

MINNESOTA

UNIT AND COUNTY	YELLOW BIRCH	COTTON-WOOD	ELM	HICKORY	HARD MAPLE	SOFT MAPLE	RED OAK	WHITE OAK	WALNUT	OTHER HARD-WOODS	ALL SPECIES
NORTHERN ASPEN-BIRCH											
CARLTON	0	0	11	0	4	0	96	0	0	0	1112
COOK	0	0	0	0	0	0	0	0	0	0	6351
KOOCHICH.	0	0	520	0	0	0	0	0	0	0	12803
LAKE	0	0	0	0	0	0	0	0	0	0	7832
ST.LOUIS	0	0	15	0	0	0	1	0	0	0	16033
UNIT TOTAL	0	0	546	0	4	0	97	0	0	0	44131
NORTHERN PINE											
AITKIN	0	0	363	0	45	125	589	80	0	0	9925
BECKER	0	0	390	0	50	0	310	197	0	0	4072
BELTRAMI	0	0	226	0	20	0	116	0	0	0	7530
CASS	0	0	4	0	0	0	302	50	0	0	11078
CLEARWATER	0	0	470	0	20	0	140	260	0	0	4058
CROW WING	0	0	222	0	40	81	860	239	0	0	6904
HUBBARD	0	0	0	0	0	0	0	0	0	0	2411
ITASCA	0	0	1274	0	0	50	75	0	0	0	23609
LAKE-WOODS	0	0	0	0	0	0	0	0	0	0	2150
MAHNOMEN	0	0	0	0	10	0	15	5	0	0	1172
ROSEAU	0	0	0	0	0	0	0	0	0	0	2313
WADENA	0	0	193	0	25	0	160	93	0	0	2933
UNIT TOTAL	0	0	3142	0	210	256	2567	924	0	0	78155
CENTRAL HARDWOODS											
ANOKA	0	15	43	0	0	0	43	22	0	0	170
BENTON	0	3	11	0	2	0	83	56	0	0	220
CARVER	0	0	100	0	30	0	10	75	0	0	305
CHISAGO	0	0	23	0	3	3	50	22	0	0	142
DAKOTA	0	0	0	0	0	0	0	0	0	0	0
DOUGLAS	0	0	0	0	0	0	0	0	0	0	0
FILLMORE	0	53	775	32	276	2	2937	906	11	1	5727
GOODHUE	0	109	240	0	48	93	311	61	48	48	1218
HENNEPIN	0	0	300	0	0	0	0	0	0	0	300
HOUSTON	0	75	479	40	22	31	3674	436	33	23	5246
ISANTI	0	0	61	0	0	0	16	44	0	0	130
KANABEC	0	222	39	0	0	22	250	28	0	0	1305
LE SUEUR	0	35	139	0	59	21	101	45	13	0	600
MILLE LACS	0	100	583	0	0	39	403	58	0	0	2662
MORRISON	0	0	72	0	12	6	90	33	0	0	795
OLMSTED	0	26	60	0	22	12	244	79	7	8	541
OTTER TAIL	0	0	302	0	41	0	349	149	0	0	1692
PINE	0	0	0	0	0	0	62	0	0	0	524
RAMSEY	0	0	0	0	0	0	0	0	0	0	0
RICE	0	18	87	0	25	14	74	33	21	6	371
SCOTT	0	0	0	0	20	0	60	25	0	0	185
SHERBURNE	0	0	61	0	0	28	83	28	0	0	217
STEARNS	0	16	320	0	22	11	84	62	0	0	970
TODD	0	0	201	0	18	17	173	98	0	0	1065
WABASHA	0	27	47	2	19	43	467	151	7	0	894
WASHINGTON	0	0	0	0	0	0	0	0	0	0	0
WINONA	0	76	155	4	33	54	1948	659	61	18	3158
WRIGHT	0	12	17	0	2	0	2	3	0	0	170
UNIT TOTAL	0	787	4115	78	654	396	11514	3073	201	104	28607
PRAIRIE											
BIG STONE	0	0	0	0	0	0	0	0	0	0	0
BLUE EARTH	0	0	0	0	0	0	0	0	0	0	0
BROWN	0	0	0	0	0	0	0	0	5	0	5
CHIPPEWA	0	110	0	0	0	0	0	0	0	0	110
CLAY	0	222	0	0	0	0	0	0	0	0	222
COTTONWOOD	0	0	0	0	0	0	0	0	0	0	0
DODGE	0	0	0	0	0	0	0	0	0	0	0
FARIBAULT	0	414	0	0	0	0	0	0	0	0	414
FREEBORN	0	0	0	0	0	0	0	0	0	0	0
GRANT	0	0	0	0	0	0	0	0	0	0	0
JACKSON	0	0	0	0	0	0	0	0	0	0	0
KANDIYOHI	0	2	0	0	0	0	0	0	0	0	2
KITTSON	0	0	0	0	0	0	0	0	0	0	0
LAC QUI PA	0	0	0	0	0	0	0	0	0	0	0
LINCOLN	0	0	0	0	0	0	0	0	0	0	0
LYON	0	0	0	0	0	0	0	0	0	0	0
MCLEOD	0	640	852	0	1	60	24	36	0	0	1765
MARSHALL	0	0	0	0	0	0	0	40	0	0	40
MARTIN	0	0	0	0	0	0	0	0	0	0	0
MEEKER	0	308	438	0	0	40	36	52	0	0	990
MOWER	0	0	0	0	0	0	0	0	0	0	0
MURRAY	0	0	0	0	0	0	0	0	0	0	0
NICOLLET	0	26	104	0	44	16	76	34	10	0	450
NOBLES	0	0	0	0	0	0	0	0	0	0	0
NORMAN	0	155	0	0	0	0	0	0	0	0	155
PENNINGTON	0	0	0	0	0	0	0	0	0	0	0
PIPESTONE	0	0	0	0	0	0	0	0	0	0	0
POLK	0	389	244	0	0	0	0	0	0	0	672
POPE	0	0	0	0	0	0	0	0	0	0	0
RED LAKE	0	0	0	0	0	0	0	0	0	0	0
REDWOOD	0	10	15	0	0	5	0	0	15	0	50
RENVILLE	0	10	0	0	0	0	0	0	0	0	10
ROCK	0	0	0	0	0	0	0	0	0	0	0
SIBLEY	0	0	0	0	0	0	0	0	0	0	0
STEELE	0	4	17	0	6	3	16	7	2	0	75
STEVENS	0	0	0	0	0	0	0	0	0	0	0
SWIFT	0	100	0	0	0	0	0	0	0	0	100
TRAVERSE	0	0	0	0	0	0	0	0	0	0	0
WASECA	0	9	35	0	15	5	25	21	3	0	160
WATONWAN	0	0	0	0	0	0	0	0	0	0	0
WILKIN	0	0	0	0	0	0	0	0	0	0	0
Y.MEDICINE	0	10	0	0	0	0	0	0	0	0	10
UNIT TOTAL	0	2409	1705	0	66	129	177	190	35	0	5230
STATE TOTAL	0	3196	9508	78	934	781	14355	4187	236	104	156123

(TABLE 11 CONTINUED ON NEXT PAGE)

(TABLE 11 CONTINUED)

WISCONSIN

UNIT AND COUNTY	CEDAR	BALSAM FIR	HEMLOCK	JACK PINE	RED PINE	WHITE PINE	SPRUCE	TAMA-RACK	ASH	ASPEN	BALSAM POPLAR	BASS-WOOD	BEECH	WHITE BIRCH
NORTHEASTERN														
FLORENCE	12	12	145	2	72	404	16	0	11	831	0	519	0	313
FOREST	510	23	1958	162	569	1983	71	0	81	3824	0	1071	0	495
LANGLADE	15	5	99	66	62	383	5	0	128	723	0	514	0	119
LINCOLN	6	11	89	13	97	500	0	0	271	938	0	385	0	160
MARINETTE	75	0	48	176	476	647	0	0	49	2285	19	182	3	202
OCONTO	120	7	66	2	420	481	22	3	340	4638	71	116	57	133
ONEIDA	89	98	81	382	912	1560	28	0	41	2531	0	180	0	589
SHAWANO	679	26	2443	7	99	4956	25	0	767	3532	0	2120	256	936
VILAS	28	99	197	867	1848	4125	81	0	13	6197	0	267	0	1308
UNIT TOTAL	1534	281	5126	1677	4555	15039	248	3	1701	25499	90	5354	316	4255
NORTHWESTERN														
ASHLAND	0	390	47	447	1295	2327	463	5	45	2032	0	301	0	50
BARRON	0	0	0	1	32	341	0		121	532	0	373	0	12
BAYFIELD	13	478	62	1006	1189	3782	347	5	11	1471	0	123	0	115
BURNETT	0	0	0	124	77	180	0	0	15	152	0	55	0	0
DOUGLAS	0	59	0	1144	1402	957	356	0	0	561	0	10	0	10
IRON	53	440	175	123	531	1809	232	0	72	759	0	295	0	158
POLK	0	0	0	0	26	159	0	0	100	420	0	328	0	31
PRICE	0	263	234	364	1285	1801	432	5	203	2101	0	295	0	138
RUSK	0	1	0	0	41	207	0	0	174	1955	0	443	0	256
SAWYER	0	8	0	73	596	2633	0	0	256	5044	0	650	0	444
TAYLOR	0	0	0	0	0	6	0	0	121	537	0	356	0	71
WASHBURN	0	0	0	51	59	28	0	0	24	2737	0	689	0	5
UNIT TOTAL	66	1639	518	3333	6533	14230	1830	15	1142	18301	0	3918	0	1290
CENTRAL														
ADAMS	0	0	0	0	16	183	0	0	10	67	0	22	0	13
CHIPPEWA	0	0	0	0	55	215	0	0	6	1319	0	713	0	32
CLARK	0	0	1	1	19	731	0	0	190	1102	0	505	0	41
EAU CLAIR	0	0	0	0	0	50	0	0	0	12	0	49	0	6
JACKSON	0	0	0	0	36	189	0	0	4	64	0	126	0	10
JUNEAU	0	0	0	0	40	69	0	0	78	184	0	87	0	23
MARATHON	0	4	273	4	39	406	3	0	481	586	0	1558	0	38
MARQUETTE	0	0	0	0	48	77	0	0	5	8	0	1	0	2
MONROE	0	0	0	0	5	30	0	0	52	181	0	234	0	25
PORTAGE	0	0	0	0	11	132	0	0	30	110	0	172	0	5
WAUPACA	0	24	62	5	34	1049	25	0	271	28	0	424	27	3
WAUSHARA	5	0	4	30	226	524	0	0	53	0	0	100	0	5
WOOD	0	0	0	0	2	98	0	0	78	85	0	129	0	2
UNIT TOTAL	5	28	340	40	531	3753	28	0	1258	3746	0	4120	27	205

(TABLE 11 CONTINUED ON NEXT PAGE)

(TABLE 11 CONTINUED)

WISCONSIN

UNIT AND COUNTY	CEDAR	BALSAM FIR	HEMLOCK	JACK PINE	RED PINE	WHITE PINE	SPRUCE	TAMA-RACK	ASH	ASPEN	BALSAM POPLAR	BASS-WOOD	BEECH	WHITE BIRCH
SOUTHWESTERN														
BUFFALO	0	0	0	0	0	20	0	0	4	643	0	472	0	306
CRAWFORD	0	0	0	0	1	28	0	0	108	173	0	285	0	10
DUNN	0	0	0	0	25	65	0	0	120	85	0	605	0	5
GRANT	0	0	0	0	3	10	0	0	63	115	0	163	0	0
IOWA	0	0	0	0	0	0	0	0	42	47	0	101	0	2
LACROSSE	0	0	0	0	0	0	0	0	20	51	0	158	0	14
LAFAYETTE	0	0	0	0	0	0	0	0	6	85	0	31	0	0
PEPIN	0	0	0	0	0	0	0	0	10	10	0	108	0	5
PIERCE	0	0	0	0	0	40	0	0	60	60	0	602	0	5
RICHLAND	0	0	0	0	0	0	0	0	62	156	0	514	0	12
ST.CROIX	0	0	0	0	25	50	0	0	41	21	0	194	0	11
SAUK	0	0	0	0	0	5	0	0	163	458	0	411	0	6
TREMPEALEU	0	0	0	0	10	30	0	0	8	90	0	165	0	19
VERNON	0	0	0	0	0	26	0	0	164	47	0	980	0	11
UNIT TOTAL	0	0	0	0	64	274	0	0	871	2041	0	4789	0	406
SOUTHEASTERN														
BROWN	31	0	16	0	4	77	0	0	73	67	32	147	147	37
CALUMET	4	0	0	0	0	10	0	0	50	3	0	25	0	31
COLUMBIA	0	0	0	0	10	10	0	0	23	33	0	121	0	2
DANE	0	0	0	0	0	0	0	0	0	0	0	5	0	0
DODGE	0	0	0	0	0	0	0	0	19	11	0	27	0	0
DOOR	40	0	14	0	5	23	0	0	33	46	22	32	33	54
FOND DULAC	0	0	0	0	0	5	0	0	1	0	0	6	0	0
GREEN	0	0	0	0	0	4	0	0	12	36	0	5	0	0
GREEN LAKE	0	0	0	0	17	53	0	0	65	10	0	62	0	0
JEFFERSON	0	0	0	0	0	0	0	0	16	0	0	10	0	0
KENOSHA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KEWAUNEE	8	0	10	0	2	63	0	0	61	38	43	85	114	43
MANITOWOC	3	0	55	0	0	250	0	0	233	90	11	236	103	7
MILWAUKEE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OUTAGAMIE	3	0	0	0	7	693	0	0	165	123	5	189	37	5
OZAUKEE	0	0	0	0	0	0	0	0	3	0	0	0	0	0
RACINE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROCK	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SHEBOYGAN	7	0	0	0	0	38	0	0	82	13	0	24	17	0
WALWORTH	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASHINGTON	0	0	0	0	0	0	0	0	12	0	0	15	0	0
WAUKESHA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WINNEBAGO	10	0	0	0	0	86	0	0	46	4	5	11	0	6
UNIT TOTAL	106	0	95	0	45	1312	0	0	894	474	118	1000	451	185
STATE TOTAL	1711	1948	6079	5050	11728	34608	2106	18	5866	50061	208	19181	794	6341

(TABLE 11 CONTINUED ON NEXT PAGE)

(TABLE 11 CONTINUED)

WISCONSIN

UNIT AND COUNTY	YELLOW BIRCH	COTTON-WOOD	ELM	HICKORY	HARD MAPLE	SOFT MAPLE	RED OAK	WHITE OAK	WALNUT	OTHER HARD-WOODS	ALL SPECIES
NORTHEASTERN											
FLORENCE	139	0	1186	0	2613	34	71	0	0	46	6426
FOREST	827	0	1927	0	4816	161	75	0	4	87	18644
LANGLADE	130	0	1981	5	2301	117	117	0	0	100	6870
LINCOLN	129	0	1938	0	1150	302	241	8	0	0	6238
MARINETTE	22	0	1247	1	433	203	707	275	0	0	7050
OCONTO	49	32	2004	2	675	394	851	243	0	0	10726
ONEIDA	125	0	480	0	406	80	341	24	0	0	7947
SHAWANO	822	0	11101	164	6077	1149	3103	321	0	144	38727
VILAS	71	0	75	0	390	37	407	2	0	6	16018
UNIT TOTAL	2314	32	21939	172	18861	2477	5913	873	4	383	118646
NORTHWESTERN											
ASHLAND	165	0	182	0	299	75	50	1	0	0	8174
BARRON	2	0	395	0	633	66	1822	347	0	0	4677
BAYFIELD	37	0	41	0	222	28	174	2	0	0	9106
BURNETT	0	0	60	2	51	50	1004	0	65	0	1835
DOUGLAS	0	0	10	0	16	0	3	0	0	0	4528
IRON	227	0	288	0	830	114	179	1	0	0	6286
POLK	0	14	201	5	355	76	1788	441	30	0	3974
PRICE	148	0	1434	0	602	199	258	3	0	0	9765
RUSK	63	0	600	0	725	242	766	25	0	0	5498
SAWYER	119	0	385	0	503	74	253	4	0	0	11042
TAYLOR	95	0	1068	0	483	259	249	21	0	0	3266
WASHBURN	0	0	5	0	10	12	352	10	0	0	3982
UNIT TOTAL	856	14	4669	7	4729	1195	6898	855	95	0	72133
CENTRAL											
ADAMS	5	2	69	1	21	61	566	47	0	4	1087
CHIPPEWA	50	0	621	0	300	184	537	40	0	0	4072
CLARK	128	0	1358	0	469	246	1547	781	0	0	7119
EAU CLAIR	12	0	0	0	50	12	162	0	0	0	353
JACKSON	1	30	243	5	154	303	1803	233	0	1	3202
JUNEAU	8	5	163	1	79	158	1460	348	0	6	2709
MARATHON	281	0	6064	25	3312	922	1867	241	0	106	16210
MARQUETTE	0	10	29	0	24	88	882	140	0	0	1314
MONROE	5	21	390	32	261	314	3281	700	0	5	5536
PORTAGE	0	0	332	5	108	133	825	55	0	4	1922
WAUPACA	60	0	1685	37	1165	572	1442	263	0	107	7283
WAUSHARA	0	0	161	4	56	129	461	203	0	3	1964
WOOD	4	0	451	0	33	67	932	93	0	4	1978
UNIT TOTAL	554	68	11566	110	6032	3189	15765	3144	0	240	54749

(TABLE 11 CONTINUED ON NEXT PAGE)

(TABLE 11 CONTINUED)

WISCONSIN

UNIT AND COUNTY	YELLOW BIRCH	COTTON-WOOD	ELM	HICKORY	HARD MAPLE	SOFT MAPLE	RED OAK	WHITE OAK	WALNUT	OTHER HARD-WOODS	ALL SPECIES
SOUTHWESTERN											
BUFFALO	0	90	376	704	41	731	9565	1406	0	10	14368
CRAWFORD	0	74	361	23	358	204	3596	1527	182	43	6973
DUNN	0	15	378	13	391	45	1260	295	0	20	3322
GRANT	0	44	203	22	218	124	1587	1011	103	15	3681
IOWA	3	12	148	6	152	61	900	527	106	2	2109
LACROSSE	0	169	476	174	156	433	3435	822	39	1	5948
LAFAYETTE	0	0	0	12	11	11	178	54	18	2	408
PEPIN	0	20	48	2	96	0	100	40	0	15	454
PIERCE	0	25	367	20	558	30	347	60	0	15	2189
RICHLAND	3	2	223	16	1074	55	1552	645	55	6	4375
ST.CROIX	5	10	220	10	221	16	219	35	0	5	1083
SAUK	5	145	416	112	510	284	5521	1706	54	5	9801
TREMPEALEU	0	30	207	36	127	97	2825	557	0	0	4201
VERNON	0	18	598	156	1365	260	4620	1158	63	18	9484
UNIT TOTAL	16	654	4021	1306	5278	2351	35705	9843	620	157	68396
SOUTHEASTERN											
BROWN	5	154	334	0	69	189	135	209	1	0	1727
CALUMET	0	7	229	0	12	7	38	72	0	0	488
COLUMBIA	3	12	103	0	118	91	2219	219	2	6	2972
DANE	0	0	20	0	40	10	397	1180	48	7	1707
DODGE	0	25	19	9	11	28	222	110	3	58	542
DOOR	0	0	58	0	60	32	33	1	0	0	486
FOND DULAC	0	5	17	1	9	36	22	18	0	15	135
GREEN	0	0	20	23	14	7	568	91	89	9	878
GREEN LAKE	0	12	78	0	22	180	594	174	0	8	1275
JEFFERSON	0	0	0	0	9	2	43	48	0	0	128
KENOSHA	0	0	0	0	0	0	0	0	0	0	0
KEWAUNEE	0	11	252	0	185	169	24	29	0	0	1137
MANITOWOC	0	37	545	11	256	482	220	180	0	2	2721
MILWAUKEE	0	0	0	0	0	0	0	0	0	0	0
OUTAGAMIE	10	62	1756	0	235	797	860	361	0	0	5308
OZAUKEE	0	0	10	0	0	13	0	0	0	0	26
RACINE	0	0	0	0	0	0	0	0	0	0	0
ROCK	0	0	0	0	0	0	0	0	16	4	20
SHEBOYGAN	0	8	143	0	22	155	79	30	0	9	627
WALWORTH	0	0	0	0	0	0	0	0	0	0	0
WASHINGTON	0	11	71	0	15	25	11	16	0	3	179
WAUKESHA	0	0	0	0	0	0	0	0	3	0	3
WINNEBAGO	0	5	33	0	5	63	33	94	1	1	403
UNIT TOTAL	18	349	3688	44	1082	2286	5498	2832	163	122	20762
STATE TOTAL	3758	1117	45883	1639	35982	11498	69779	17547	882	902	334686

[1]International ¼-inch rule.

Table 12.—*Lake States veneer log production by State, species, and area of destination, 1975*
(In thousand board feet)[1]

MICHIGAN

Species	Destination of wood						Total
	Michigan	Wisconsin	Indiana	Ohio	Kentucky	Canada	
SOFTWOODS:							
Cedar	0	0	0	0	0	0	0
Balsam fir	0	0	0	0	0	0	0
Hemlock	0	0	0	0	0	0	0
Jack pine	0	0	0	0	0	0	0
Red pine	0	0	0	0	0	0	0
White pine	0	0	0	0	0	0	0
Spruce	0	0	0	0	0	0	0
Tamarack	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
HARDWOODS:							
Ash	50	141	0	0	5	0	196
Aspen	12,655	9	0	0	0	0	12,664
Balsam poplar	0	0	0	0	0	0	0
Basswood	584	161	21	0	0	0	766
Beech	112	466	0	0	0	116	694
Paper birch	536	397	0	0	7	0	940
Yellow birch	0	2,829	0	0	0	0	2,829
Cottonwood	440	0	0	0	0	0	440
Elm	18	343	0	0	0	0	361
Hickory	28	0	17	0	3	0	48
Hard maple	536	3,467	297	134	25	209	4,668
Soft maple	333	236	0	0	0	0	569
Red oak	229	918	157	0	20	0	1,324
White oak	34	0	94	13	40	0	181
Walnut	0	0	143	64	96	0	303
Other hardwoods	54	35	7	0	0	0	96
Total	15,609	9,002	736	211	196	325	26,079
All species	15,609	9,002	736	211	196	325	26,079

(Table 12 continued on next page)

(Table 12 continued)

MINNESOTA

Species	Destination of Wood							
	Minnesota	Wisconsin	Michigan	Kentucky	Iowa	Canada	Other Countries	Total
SOFTWOODS:								
Cedar	0	0	0	0	0	0	0	0
Balsam fir	0	0	0	0	0	0	0	0
Hemlock	0	0	0	0	0	0	0	0
Jack pine	0	0	0	0	0	0	0	0
Red pine	0	0	0	0	0	0	0	0
White pine	0	0	0	0	0	0	0	0
Spruce	0	0	0	0	0	0	0	0
Tamarack	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
HARDWOODS:								
Ash	0	17	0	0	0	0	0	17
Aspen	15	0	357	0	0	71	0	443
Balsam poplar	0	0	0	0	0	0	0	0
Basswood	139	278	0	0	0	0	0	417
Beech	0	0	0	0	0	0	0	0
Paper birch	0	190	0	0	0	0	0	190
Yellow birch	0	10	0	0	0	0	10	20
Cottonwood	36	322	0	0	0	0	0	358
Elm	31	292	0	14	0	0	39	376
Hickory	0	0	0	0	0	0	0	0
Hard maple	5	280	0	0	0	0	5	290
Soft maple	92	76	0	0	0	0	0	168
Red oak	78	656	0	0	0	0	17	751
White oak	0	3	0	0	0	0	26	29
Walnut	0	0	0	41	1	0	109	151
Other hardwoods	0	0	0	6	0	0	0	6
Total	396	2,124	357	61	1	71	206	3,216
All species	396	2,124	357	61	1	71	206	3,216

(Table 12 continued on next page)

(Table 12 continued)

WISCONSIN

Species	Destination of wood						
	Wisconsin	Michigan	Indiana	Iowa	Minnesota	Kentucky	Total
SOFTWOODS:							
Cedar	0	0	0	0	0	0	0
Balsam fir	0	0	0	0	0	0	0
Hemlock	0	0	0	0	0	0	0
Jack pine	0	0	0	0	0	0	0
Red pine	0	0	0	0	0	0	0
White pine	18	0	0	0	0	0	18
Spruce	0	0	0	0	0	0	0
Tamarack	0	0	0	0	0	0	0
Total	18	0	0	0	0	0	18
HARDWOODS:							
Ash	482	0	0	0	0	0	482
Aspen	229	10,886	0	0	21	0	11,136
Balsam poplar	0	0	0	0	0	0	0
Basswood	870	0	0	0	51	0	921
Beech	27	0	0	0	0	0	27
Paper birch	272	0	0	0	0	0	272
Yellow birch	820	0	0	0	0	0	820
Cottonwood	117	0	0	0	0	0	117
Elm	3,719	0	0	0	0	6	3,725
Hickory	26	0	0	0	0	4	30
Hard maple	3,444	0	0	0	0	0	3,444
Soft maple	709	0	0	0	26	0	735
Red oak	9,185	0	19	0	0	18	9,222
White oak	440	0	15	0	0	16	471
Walnut	0	0	107	121	0	18	246
Other hardwoods	21	0	5	0	0	0	26
Total	20,361	10,886	146	121	98	62	31,674
All species	20,379	10,886	146	121	98	62	31,692

[1]International ¼-inch rule.

Table 13.—*Lake States veneer log production by county and species, 1975*
(In thousand board feet)[1]

MICHIGAN

Unit and county	Ash	Aspen	Bass-wood	Beech	White birch	Yellow birch	Cotton-wood	Elm	Hickory	Hard maple	Soft maple	Red oak	White oak	Walnut	Other hard-woods	All species
E. UPPER PENINSULA:																
Alger	0	0	0	139	25	157	0	21	0	336	θ	11	0	0	3	692
Chippewa	0	0	0	80	36	136	0	20	0	259	0	0	0	0	2	533
Delta	0	0	4	64	325	105	0	20	0	212	21	3	0	0	2	756
Luce	0	0	100	95	26	118	0	13	0	381	0	0	0	0	2	735
Mackinac	0	0	50	60	36	106	0	15	0	272	0	0	0	0	2	541
Menominee	3	0	4	41	202	103	0	20	0	205	20	4	0	0	2	604
Schoolcraft	0	0	0	101	56	126	0	20	0	253	0	0	0	0	2	558
Total	3	0	158	580	706	851	0	129	0	1,918	41	18	0	0	15	4,419
W. UPPER PENINSULA:																
Baraga	0	352	7	0	19	269	0	26	0	252	22	71	0	0	2	1,020
Dickinson	3	0	3	0	26	100	0	12	0	36	12	10	0	0	1	203
Gogebic	130	506	22	1	19	281	0	38	0	349	24	8	0	0	3	1,381
Houghton	0	252	79	0	15	276	0	23	0	334	42	32	0	0	2	1,055
Iron	4	266	11	0	36	267	0	28	0	121	25	12	0	0	5	775
Keweenaw	0	0	3	0	7	116	0	9	0	70	8	109	0	0	1	323
Marquette	0	0	10	0	91	384	0	41	0	416	34	542	0	0	3	1,521
Ontonagon	1	11,208	18	1	21	285	0	37	0	380	28	12	0	0	3	11,994
Total	138	12,584	153	2	234	1,978	0	214	0	1,958	195	796	0	0	20	18,272
N. LOWER PENINSULA:																
Emmet	0	0	250	0	0	0	0	0	0	200	0	0	0	0	0	450
Grand Traverse	0	0	0	0	0	0	0	0	0	12	0	12	0	0	0	24
Lake	0	35	0	0	0	0	35	0	0	0	35	35	0	0	0	140
Mason	0	0	0	0	0	0	0	0	0	10	0	15	0	0	0	25
Newaygo	0	35	0	0	0	0	35	0	0	0	35	35	0	0	0	140
Oceana	0	0	138	0	0	0	69	0	0	0	138	69	0	0	0	414
Otsego	0	0	0	0	0	0	0	0	0	15	0	8	0	0	2	25
Total	0	70	388	0	0	0	139	0	0	237	208	174	0	0	2	1,218
S. LOWER PENINSULA																
Allegan	0	0	0	0	0	0	0	0	0	29	0	0	4	23	0	56
Barry	2	0	0	0	0	0	0	0	0	73	11	0	12	47	0	145
Berrien	0	4	12	0	0	0	54	3	3	16	5	23	5	5	26	156
Branch	0	0	0	0	0	0	0	0	0	15	0	31	14	8	0	68
Calhoun	0	0	5	0	0	0	0	0	4	56	12	20	0	6	0	103
Cass	22	0	15	56	0	0	56	0	16	42	28	85	39	6	3	368
Eaton	0	0	0	0	0	0	0	0	0	14	0	0	0	20	0	34
Genessee	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
Hillsdale	0	0	4	0	0	0	0	0	3	23	0	55	0	5	0	90
Ingham	0	0	0	0	0	0	0	0	0	14	0	0	0	4	0	18
Ionia	0	0	0	0	0	0	0	0	0	18	0	0	1	19	0	38
Jackson	0	0	4	0	0	0	0	0	4	25	0	24	4	8	0	69
Kalamazoo	0	0	0	0	0	0	0	0	0	33	7	0	15	7	2	64
Kent	0	0	0	0	0	0	0	0	0	31	0	0	2	20	0	53
Lenawee	0	0	0	0	0	0	0	0	0	9	0	0	0	5	0	14
Livingston	0	0	0	0	0	0	0	0	0	13	0	0	5	6	0	24
Montcalm	0	0	0	0	0	0	0	0	0	25	0	0	4	22	0	51
Muskegon	0	0	0	0	0	0	0	0	0	32	0	0	6	32	0	70
Oakland	0	0	0	0	0	0	0	0	0	0	0	0	1	16	0	17
Ottawa	0	0	0	0	0	0	0	0	0	12	0	0	2	8	0	22
Saginaw	1	0	0	0	0	0	0	0	0	30	0	17	33	5	0	86
St. Joseph	2	0	0	0	0	0	0	0	1	11	0	36	15	8	0	73
Van Buren	28	6	27	56	0	0	191	15	17	17	62	45	19	10	28	521
Washtenaw	0	0	0	0	0	0	0	0	0	17	0	0	0	9	0	26
Total	55	10	67	112	0	0	301	18	48	555	125	336	181	303	59	2,170
State Total	196	12,664	766	694	940	2,829	440	361	48	4,668	569	1,324	181	303	96	26,079

(Table 13 continued on next page)

(Table 13 continued)

MINNESOTA

Unit and county	Ash	Aspen	Bass-wood	White birch	Yellow birch	Cotton-wood	Elm	Hard maple	Soft maple	Red oak	White oak	Walnut	Other hard-woods	All species
NORTHERN ASPEN-BIRCH:														
Carlton	0	0	0	0	0	0	0	1	3	1	0	0	0	5
Cook	0	8	0	0	0	0	0	0	0	0	0	0	0	8
Koochiching	0	0	0	83	0	0	0	0	0	0	0	0	0	83
Lake	0	420	0	0	0	0	0	0	0	0	0	0	0	420
St. Louis	0	0	1	2	14	0	6	6	8	0	0	0	0	37
Total	0	428	1	85	14	0	6	7	11	1	0	0	0	553
NORTHERN PINE:														
Aitkin	1	10	27	1	1	0	2	14	11	30	0	0	0	97
Beltrami	0	0	0	28	0	0	0	0	0	0	0	0	0	28
Cass	0	0	2	1	1	0	1	5	2	5	0	0	0	17
Itasca	0	0	2	75	4	0	3	10	2	3	0	0	0	99
Total	1	10	31	105	6	0	6	29	15	38	0	0	0	241
CENTRAL HARDWOODS:														
Carver	0	0	0	0	0	0	0	40	0	0	0	0	0	40
Dakota	0	0	0	0	0	0	0	15	0	0	0	0	0	15
Fillmore	6	0	59	0	0	4	6	4	8	126	0	0	0	213
Goodhue	0	0	37	0	0	50	44	1	50	45	2	7	0	236
Houston	7	0	68	0	0	5	21	8	9	187	0	41	6	352
Kanabec	0	5	26	0	0	0	5	0	0	1	0	0	0	37
Le Sueur	0	0	0	0	0	22	19	64	26	0	0	0	0	131
Mille Lacs	0	0	51	0	0	0	0	5	0	26	0	0	0	82
Olmsted	1	0	25	0	0	37	34	1	4	43	0	0	0	145
Rice	0	0	0	0	0	17	15	43	4	0	0	0	0	79
Scott	0	0	0	0	0	0	0	38	15	0	0	0	0	53
Wabasha	1	0	31	0	0	43	36	2	5	98	0	0	0	216
Winona	1	0	47	0	0	76	106	7	7	157	17	59	0	477
Total	16	5	344	0	0	254	286	228	128	683	19	107	6	2,076
PRAIRIE:														
Blue Earth	0	0	0	0	0	0	3	0	0	2	3	14	0	22
Brown	0	0	0	0	0	0	5	0	0	3	5	20	0	33
Dodge	0	0	0	0	0	6	5	0	0	10	0	0	0	21
Faribault	0	0	0	0	0	0	2	0	0	2	2	10	0	16
Freeborn	0	0	0	0	0	0	8	0	0	0	0	0	0	8
McLeod	0	0	36	0	0	43	6	0	0	0	0	0	0	85
Mower	0	0	3	0	0	0	1	0	0	12	0	0	0	16
Nicollet	0	0	0	0	0	12	11	0	8	0	0	0	0	31
Pennington	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Renville	0	0	0	0	0	10	9	0	0	0	0	0	0	19
Sibley	0	0	0	0	0	18	15	10	0	0	0	0	0	43
Steele	0	0	0	0	0	7	6	8	2	0	0	0	0	23
Waseca	0	0	0	0	0	8	7	8	4	0	0	0	0	27
Total	0	0	41	0	0	104	78	26	14	29	10	44	0	346
State Total	17	443	417	190	20	358	376	290	168	751	29	151	6	3,216

(Table 13 continued on next page)

(Table 13 continued)

WISCONSIN

Unit and county	White pine	Ash	Aspen	Bass-wood	Beech	White birch	Yellow birch	Cotton-wood	Elm	Hickory	Hard maple	Soft maple	Red oak	White oak	Walnut	Other hard-woods	All species
NORTHEASTERN:																	
Florence	15	14	14	0	0	2	0	0	1,529	0	777	0	41	0	0	0	2,392
Forest	3	2	0	0	0	0	0	0	161	0	221	0	7	0	0	0	394
Langlade	0	26	31	141	0	16	109	0	84	0	390	23	55	0	0	0	875
Lincoln	0	5	0	0	0	6	71	0	27	0	4	0	46	0	0	0	159
Marinette	0	7	0	11	0	10	84	0	37	0	100	129	62	5	0	0	445
Oconto	0	5	0	3	0	6	71	0	27	0	11	48	46	0	0	0	217
Oneida	0	5	653	0	0	6	71	0	27	0	4	0	46	0	0	0	812
Shawano[2]	0	66	39	98	27	15	36	0	293	0	807	103	496	3	0	1	1,984
Vilas	0	0	1,742	0	0	0	0	0	0	0	0	0	0	0	0	0	1,742
Total	18	130	2,479	253	27	61	442	0	2,185	0	2,314	303	799	8	0	1	9,020
NORTHWESTERN:																	
Ashland	0	7	2,068	0	0	16	76	0	49	0	50	0	8	0	0	0	2,274
Barron	0	11	59	0	0	6	1	0	36	0	58	0	164	0	0	0	335
Bayfield	0	7	1,096	0	0	14	76	0	74	0	50	0	8	0	0	0	1,325
Burnett	0	0	8	0	0	0	0	0	10	0	0	0	6	0	0	0	24
Douglas	0	0	555	0	0	0	0	0	22	0	0	0	0	0	0	0	577
Iron	0	7	3,375	0	0	11	76	0	49	0	23	0	8	0	0	0	3,549
Polk	0	11	6	0	0	6	1	0	155	0	4	0	487	0	0	0	670
Price	0	0	7	10	0	0	0	0	36	0	0	0	0	0	0	0	53
Rusk	0	0	109	0	0	0	0	0	0	0	0	0	20	0	0	0	129
Sawyer	0	0	871	0	0	0	0	0	28	0	32	0	29	0	0	0	960
Taylor	0	0	6	0	0	0	0	0	21	0	0	0	0	0	0	0	27
Washburn	0	0	446	0	0	0	0	0	15	0	0	0	92	0	0	0	553
Total	0	43	8,606	10	0	53	230	0	495	0	217	0	822	0	0	0	10,476
CENTRAL																	
Adams	0	9	0	0	0	5	8	0	43	0	4	0	33	0	0	0	102
Chippewa	0	11	0	0	0	6	1	0	27	0	3	0	242	0	0	0	290
Clark	0	9	0	0	0	5	8	0	43	0	4	0	33	0	0	0	102
Eau Claire	0	11	0	0	0	6	1	0	27	0	3	0	147	0	0	0	195
Juneau	0	0	0	0	0	0	0	0	0	0	3	0	114	0	0	0	117
Marathon	0	24	0	61	0	11	43	0	88	0	125	28	117	3	0	0	500
Monroe	0	0	0	13	0	3	0	0	0	0	26	30	97	0	0	0	169
Portage	0	9	0	1	0	5	8	0	43	0	4	0	94	2	0	0	166
Waupaca	0	14	0	14	0	7	11	0	48	0	25	7	62	1	0	0	189
Wood	0	10	0	2	0	5	8	0	49	0	4	2	41	4	0	0	125
Total	0	97	0	91	0	53	88	0	368	0	201	67	980	10	0	0	1,955

(Table 13 continued on next page)

(Table 13 continued)

WISCONSIN (continued)

Unit and county	White pine	Ash	Aspen	Bass-wood	Beech	White birch	Yellow birch	Cotton-wood	Elm	Hickory	Hard maple	Soft maple	Red oak	White oak	Walnut	Other hard-woods	All species
SOUTHWESTERN:																	
Buffalo	0	11	0	31	0	9	1	0	27	0	46	8	170	0	0	1	304
Crawford	0	8	0	44	0	8	0	0	12	0	44	23	326	0	17	2	484
Dunn	0	11	0	8	0	6	46	0	27	0	3	0	157	0	0	0	258
Grant	0	10	0	23	0	9	0	0	12	0	42	5	204	0	18	2	325
Iowa	0	7	0	17	0	7	0	0	12	0	33	4	354	77	13	2	526
LaCrosse	0	14	0	28	0	9	1	9	28	0	26	86	508	9	5	1	724
Lafayette	0	6	0	5	0	6	0	0	12	0	18	1	189	0	4	2	243
Pepin	0	11	0	0	0	6	1	18	27	0	3	0	147	0	0	1	214
Pierce	0	11	0	0	0	6	1	0	27	0	4	0	147	0	0	0	196
Richland	0	29	0	79	0	7	0	0	40	0	156	19	443	0	13	2	788
St. Croix	0	11	0	0	0	6	8	0	27	0	4	0	147	0	0	0	203
Sauk	0	59	26	258	0	5	0	0	12	26	153	130	2,346	258	19	2	3,294
Trempealeau	0	10	20	20	0	9	1	42	38	0	28	4	165	0	0	1	338
Vernon	0	7	0	54	0	8	1	0	12	0	84	10	565	0	19	2	762
Total	0	205	46	567	0	101	60	69	313	26	644	290	5,868	344	108	18	8,659
SOUTHEASTERN:																	
Brown	0	0	0	0	0	0	0	0	0	0	9	0	28	0	0	0	37
Calumet	0	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	28
Columbia	0	6	0	0	0	4	0	0	12	0	12	0	320	58	0	2	414
Dane	0	0	0	0	0	0	0	0	0	0	0	0	143	39	10	0	192
Dodge	0	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0	27
Door	0	0	0	0	0	0	0	21	0	0	9	0	0	0	0	0	30
Green	0	0	0	0	0	0	0	0	0	0	0	0	28	6	41	0	75
Jefferson	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	17
Kenosha	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6
Kewaunee	0	0	5	0	0	0	0	0	52	0	9	0	28	0	0	0	94
Manitowoc	0	0	0	0	0	0	0	0	0	0	9	0	28	0	0	0	37
Outagamie	0	1	0	0	0	0	0	0	34	0	1	23	0	0	0	0	59
Racine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8
Rock	0	0	0	0	0	0	0	0	6	4	0	0	4	2	22	5	43
Sheboygan	0	0	0	0	0	0	0	27	260	0	9	52	80	0	0	0	428
Walworth	0	0	0	0	0	0	0	0	0	0	0	0	11	4	14	0	29
Washington	0	0	0	0	0	0	0	0	0	0	10	0	28	0	0	0	38
Waukesha	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	20
Total	0	7	5	0	0	4	0	48	364	4	68	75	753	109	138	7	1,582
State total	18	482	11,136	921	27	272	820	117	3,725	30	3,444	735	9,222	471	246	26	31,692

[1]International ¼-inch rule.
[2]Includes Menominee County.

Table 14.—*Residue produced at Lake States primary wood-using mills by type of material and use, 1975*
(In thousand tons, green weight)

State and type of use	Wood residue							
	Total		Coarse[1]		Fine[2]		Bark	
	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
TOTAL MICHIGAN:								
Fiber products	40.78	264.24	40.75	259.13	.03	5.11	.98	4.93
Charcoal	.20	.09	.20	.09	0.00	0.00	.05	0.00
Industrial fuel	11.27	58.79	3.03	13.88	8.24	44.91	7.22	38.56
Domestic fuel	4.73	62.28	4.35	53.12	.38	9.16	1.37	18.83
Miscellaneous[3]	7.18	98.97	.58	27.30	6.60	71.67	1.10	32.32
Not used	34.63	160.52	14.08	40.61	20.55	119.91	21.10	78.26
Total	98.79	644.89	62.99	394.13	35.80	250.76	31.82	172.90
TOTAL MINNESOTA:								
Fiber products	31.47	82.85	28.35	78.08	3.12	4.77	0.00	1.33
Charcoal	1.61	6.03	1.61	6.03	0.00	0.00	.66	1.84
Industry fuel	36.06	4.50	22.35	.79	13.71	3.71	12.74	7.44
Domestic fuel	10.28	28.89	9.90	23.75	.38	5.14	3.05	7.80
Miscellaneous[3]	4.67	16.73	2.50	1.42	2.17	15.31	.26	8.44
Not used	39.82	60.10	13.77	14.19	26.05	45.91	20.34	38.53
Total	123.91	199.10	78.48	124.26	45.43	74.84	37.05	65.38
TOTAL WISCONSIN:								
Fiber products	63.68	341.40	59.56	300.19	4.12	41.21	.04	2.89
Charcoal	.08	8.30	.08	8.30	0.00	0.00	.03	2.69
Industrial fuel	35.63	110.27	5.03	32.66	30.60	77.61	24.58	72.02
Domestic fuel	11.60	47.28	11.00	47.19	.60	.09	4.15	15.13
Miscellaneous[3]	10.12	118.86	.26	4.44	9.86	114.42	3.76	43.52
Not used	13.10	52.58	8.88	18.28	4.22	34.30	4.92	50.47
Total	134.21	678.69	84.81	411.06	49.40	267.63	37.48	186.72

[1]Suitable for chipping such as slabs, edgings, veneer cores, etc.
[2]Not suitable for chipping such as sawdust, veneer clippings, etc.
[3]Livestock bedding, mulch, small dimension, and specialty items.

U.S.GPO:1980-669-260/59-6

Blyth, James E., James W. Whipple, Allen H. Boelter, and Steven Wilhelm.
1980. Lake States primary forest industry and timber use, 1975. U.S. Department of Agriculture Forest Service, Resource Bulletin NC-49, 39 p. U.S. Department of Agriculture Forest Service, North Central Forest Experiment Station, St. Paul, Minnesota.

Discusses industrial roundwood production and forest industry trends in Michigan, Minnesota, and Wisconsin. Compares log and bolt production by State for several products and species and discusses primary wood-using mill residue and its use.

KEY WORDS: pulpwood, saw logs, production, wood residue, bark, particleboard.

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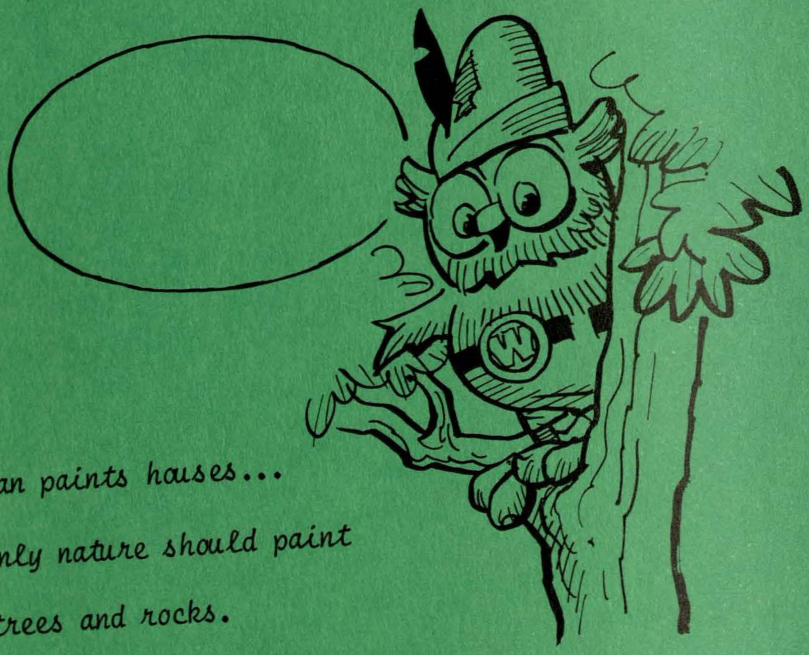

Man paints houses...

only nature should paint

trees and rocks.